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Mr Can't: 'Change of air puts me right off colour'



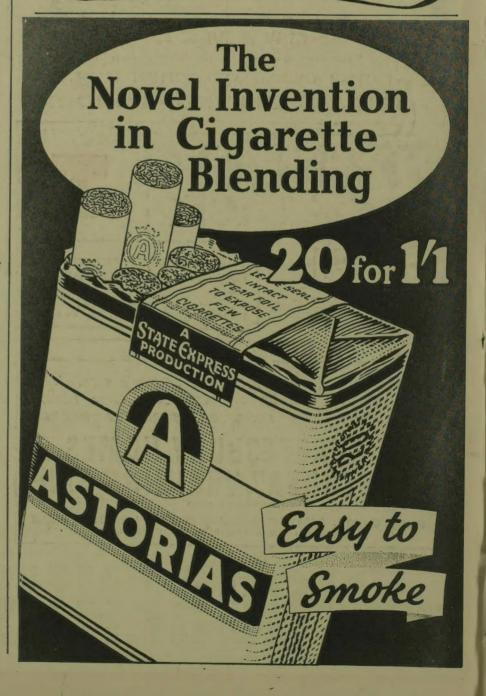
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SATURDAY, AUGUST 19, 1939.



BRITAIN'S OWN "AIR INFANTRY": MEN OF THE ROYAL ULSTER RIFLES IN ONE OF THE "BOMBAY" TRANSPORTS IN WHICH THEY WERE FLOWN FROM THE ISLE OF WIGHT TO WILTSHIRE.

Much is heard nowadays of "air infantry" and similar modernistic formations on the Continent. In point of fact, the British Army has long been familiar with the technique of transporting bodies of troops by air, and such movements have been carried out on a number of occasions in the Near East. At the same time, the photograph we give here affords another proof, if proof be needed, of the Army's determination not to let technique in the handling of modern inventions get rusty.

It was taken during the transport of men of the 2nd Battalion of the Royal Ulster Rifles from Ryde, Isle of Wight, to the camp of the 9th Infantry Brigade at Axford, near Marlborough, in Wiltshire. The distance is some fifty-five miles as the crow flies. Each of the troop-carrying 'planes—which were Bristol "Bombays," that is, the latest type of R.A.F. troop-carrier to go into service—took twenty men with full equipment, including rifles and steel helmets. (Central Press.)



By ARTHUR BRYANT.

NTIL a few years ago I used, like most of my generation, to look on myself as perennially young. I am afraid, however, there is no doubt that I have now reached middle age and the imperceptible, deceptive lapse of another decade will see me growing old. Even now it gives me a half-agreeable, half-disquieting sense of antiquity to remember that I am technically at least a Victorian, and that I was born in the same century as more than one Queen Anne's subjects and that even some of William III.'s survived into. By birth, that is, I long to the same century as Macaulay and Mr. Gladne and Benjamin Disraeli. That dates a man.

Age has its prerogatives. Reminiscence is one, other day I found myself recalling for the benefit

young acstance some the curious d, as they now em. extraordiny things I can member from y youth. Horse uses were one them, though te straw on the or had long vanished. I can recall very clearly interminabl journey to and from Victoria Park-undertaken, I think, as some kind of "treat" and the strong, delightful smell of the horses as I sat with my father in the front seat. I seem to recall my mother being little cross with my father, when we at last returned triumphant but exhausted, for having subjected me to such an exacting geographical feat. A phical feat. A good deal more exciting, and therefore clearly impressed on my memorythey came a little later, too, in point of time were the earliest motor 'buses. These I used

sample on Saturday afternoons with my long-suffering father as an important and indeed essential experience, rather as first-nighters go to plays. A new 'bus—travelling, say, from Trafalgar Square to Putney (they seldom went much farther than this) could be certain of my early patronage. We would always embark at the official starting point—to have mounted anywhere else on the route would have been tantamount to dropping in in the middle of the second act—and arrive a long time before the 'bus was scheduled to depart so as to secure front seats which, for us, were de rigueur. Fortunately, my father was a man of such faultless punctuality that he made a point of setting his watch and all clocks within his control a clear ten minutes fast, so in our house we were always well ahead of time: that indeed in my memory is one of the chief contrasts between childhood and the less organised and more hurried life of mature years. Once in the 'bus, we would remain, not even vacating our hard seats at the turning point, but would continue sitting in front to the bitter end: that is, until our return to our place of departure or, more probable, till our enforced

disembarkation after one of the vehicle's many obstinate and prolonged breakdowns. These used to occur every mile or so. Some varieties of motor 'bus—for there were many—used to break down with more devastating thoroughness than others. I cannot recall which; the only two names that now remain with me, and even these may be wrong through some trick of memory, were "Vanguard" and "Union Jack." The latter had the flag after which it was named painted upon it. Another 'bus was inappropriately—considering the London smuts—painted snow white.

Vehicles of one kind or another play a considerable part in my childhood's memory. In a specially honoured niche of recollection are the gorgeous gilded

offer a more romantic sound or sensation. A four-wheeler was reserved for more solemn occasions: going to the seaside, for instance. In those days catching a train was still something of a solemn ceremony: there was none of your modern rushing through the barrier and boarding it in motion. And as a four-wheeler was nothing if not slow—that was almost its raison d'être—one started for the station a long time before the train left. The most agreeable trains in my recollection went from Waterloo—they were always holiday and seaside trains—and the thrill of such occasions was always enhanced by a wonderful drive through an underground tunnel which, in some mysterious way, never quite clear to me, linked up York Road with the Station Yard. In a four-wheeler it seemed to take about twenty minutes

of rumbling and romantic darkness to get through it. I have never entered the Mersey Tunnel, but I am certain it could never give me half the pleasure and excitement as did this treasured wonder of the old London and South - Western Railway.

I did not feel quite the same way about the old District Railway, though that was as dark and rumbly as any child could ask. But a perpetual succession of steam engines dashing through eternal tunnels was rather too near to the traditional nursery idea of Hell to be comfortable for a child of strong imagination. One always felt on journeys by this institution
—say, from Victoria to Earl's
Court — that at any moment one might be suffo-cated like the Princes in the Tower. And though no ordinamount

ary amount of good honest dirt came amiss to a little English boy in those far days, the dirt of the old Underground was something that far exceeded anything that can now be pictured. It usually necessitated, as I learnt from experience, the inhuman ordeal of having one's face, and, consequently, one's eyes, soaped by one's nurse—a thing I would not wish my worst enemy.

Apparently middle age makes one garrulous, for I have already come to the end of my space and have far from finished my reminiscences. Perhaps on some other occasion I shall conclude them. An evening paper at which I peeped over the shoulder of a neighbour in the 'bus to-day had as a heading to an article, "I put out my tongue at Mr. Gladstone." I am glad that I have been able to recall my small share of the past without having to record any episode as grave as that. But I did once see Queen Victoria driving in an open carriage into one of the gates of the Park. I was in my pram at the time, but I remember the incident quite well. At least I believe I do, which, so far as the satisfaction it gives goes, is much the same thing.



THE ANGLO-FRENCH MISSIONS ON ARRIVAL AT THE OCTOBER RAILWAY TERMINUS, MOSCOW, HAVING TRAVELLED FROM LENINGRAD IN THE CRACK SOVIET TRAIN, "RED ARROW": (LEFT) GENERAL DOUMENC, THE FRENCH LEADER, AND (RIGHT) ADMIRAL SIR REGINALD PLUNKETT-ERNLE-ERLE-DRAX.

The British and French military, naval and air missions arrived on August 11 at the "October Terminus" at Moscow, having travelled from Leningrad in the Soviet crack train "Red Arrow." A sumptuous banquet was given in honour of the Anglo-French missions that evening by the Commission for Defence, at which Marshal Voroshiloff toasted the British and French Services. August 12 was the weekly Soviet "free day"; but Marshal Voroshiloff insisted that work should commence at once; and the beginnings of the talks were reported to be held in a most cordial atmosphere.

Photograph by Planet.

coaches and State carriages that used to be paraded

outside a nearby livery stable on the morning of a Royal levée. Each of these would, in due course, be mounted by a liveried coachman with a three-cornered hat and gargantuan calves, who, accompanied by two footmen, would drive off behind proud stepping horses

hat and gargantuan calves, who, accompanied by two footmen, would drive off behind proud stepping horses to fetch the noble lord and his lady who had, presumably, hired it for the occasion. More pedestrian as memories go were the whistles with which householders or their housemaids, standing at their open doors, summoned hackney vehicles. I have forgotten how many blasts it was that brought one a hansom cab and how many a four-wheeler: later a third signal was added for calling taxis, but as these would, as often as not, break down before they arrived, people were at first rather chary of sending for them. They were also reputed to smell disagreeably of petrol. If one was going to the pantomime one went in a hansom. I was too young then to know that Disraeli had called it the gondola of London, but I thoroughly enjoyed the sensation of bowling through space with the rhythm of easy

speed and a beguiling jingle of bells: life has yet to

CURRENT EVENTS IN BRITAIN AND FRANCE: ROAD AND AIR TRANSPORT; A.R.P., AND THE EISTEDDFOD.



FRANCE AGAIN FOR THE FIRST TIME SINCE THE WAR—"OLD CONTEMPTIBLES" AT THE BRITANNIA MEMORIAL, BOULOGNE, DURING THEIR VISIT ON AUGUST 13.

Even hundred and eight of London's "Old Contemptibles" paid, on August 13, their first visit to France since they came khaki. The first British troops to land in 1914 were the 2nd Battalion the Argyle and Sutherland Highlanders; the ondon Branch, numbering 60, were therefore invited to join the "Old Contemptibles." The party were highly greeted by the Mayor of Boulogne and by General Tencé, Military Governor of Dunkirk. Their visit is to be made an annual event. (S. and G.)



Y MAKES A START WITH THE FIRST OF ITS DEEP A.R.P. SHELTERS: WORKMEN CLEARING THE SITE AT BUSACO STREET, OFF PENTONVILLE ROAD.

the construction of deep group-shelters, proof against all types of bombs, were published by the Borough Council early this year. They were fully illustrated by us at the time—as, for instance, sue of February 11. The Finsbury Council, with commendable initiative, have now of go ahead with the excavation of their first deep shelter, at Busaco Street. It will late 8000. The initial stage of the Finsbury plans will cost £100,000. (Wide World.)



WAR OFFICE MOBILE "INFORMATION BUREAU" LEAVING WHITEHALL ON A TWO-

months' tour of the Western, Scottish and Northern Commands.

mobile "Information Bureau" which the War Department has despatched on a tyns' tour of the Western, Scottish and Northern Commands is fitted with equipme le of addressing crowds of from 200 to 50,000 people. It is staffed by Army recruit sy and for part of the tour will be accompanied by a military band. Above, the vehi is seen in the quadrangle of the War Office before its departure. (Wide World.)



IMPERIAL AIRWAYS' GIFT OF GROUSE TO PRESIDENT ROOSEVELT, RECEIVED BY CAPTAIN BENNETT, COMMANDING THE "CABOT," This brace of birds was shot in Yorkshire on the "Twelfth," and the flying-boat "Cabot," carrying them to President Roosevelt, arrived at Port Washington on the 13th at 11.15, B.S.T., half an hour before her schedule. This was the second flight of Britain's Atlantic air-mail service. (Topical.)



CURVING BOLDLY THROUGH THE THAMES VALLEY—A FORECAST OF THE APPEARANCE OF THE NEW MAIDENHEAD BY-PASS (LOOKING S.W.) CROSSING THE THAMES NEAR BRAY. Road work began on the new Maidenhead by-pass this April. The by-pass starts three miles from Maidenhead on the Slough side, crossing the Thames near Bray just north of Monkey Island. The road, whose total length will be some four miles, will come out on the Bath Road, two miles the other side of Maidenhead. It is to have 6-ft. footpaths, dual carriage-ways 22 ft. wide, and 9-ft. cycle-tracks. Completion is scheduled for 1941. (Planet.)



LEAVING THE GORSEDD FIELD—A SCENE FROM THIS YEAR'S EISTEDDFOD, HELD AT DENBIGH, UNIQUE IN EISTEDDFOD HISTORY IN WITHHOLDING BOTH CHAIR AND BARDIC CROWN.

This year's Eisteddfod was unique in that for the first time in its history the two important literary awards, for the Bardic Crown (on August 8) and the Chair competition (on August 10), were both withheld. It is eleven years since the Chair was withheld; forty-three since the Crown. The large audiences, numbering over 10,000, were disappointed; as was Mr. Lloyd George, President of the Chairing Session for the last three years. The Eisteddfod in its present form dates from the fourth century. (Fox Photos.)

TREASURE AT SUTTON HOO: THE BURIAL SHIP, AND THE INQUEST.





A SCENE AT THE INQUEST ON THE SUTTON HOO TREASURE: THE CORONER, SEATED AT A COVERED BILLIARDS TABLE, WITH (LEFT) SIR GEORGE HILL, FORMERLY KEEPER OF THE BRITISH MUSEUM; AND (RIGHT) THE CHIEF CONSTABLE FOR SUFFOLK. MR. T. D. KENDRICK, KEEPER OF BRITISH AND MEDIÆVAL ANTIQUITIES AT THE BRITISH MUSEUM, WAS ALSO PRESENT. (A.P.)

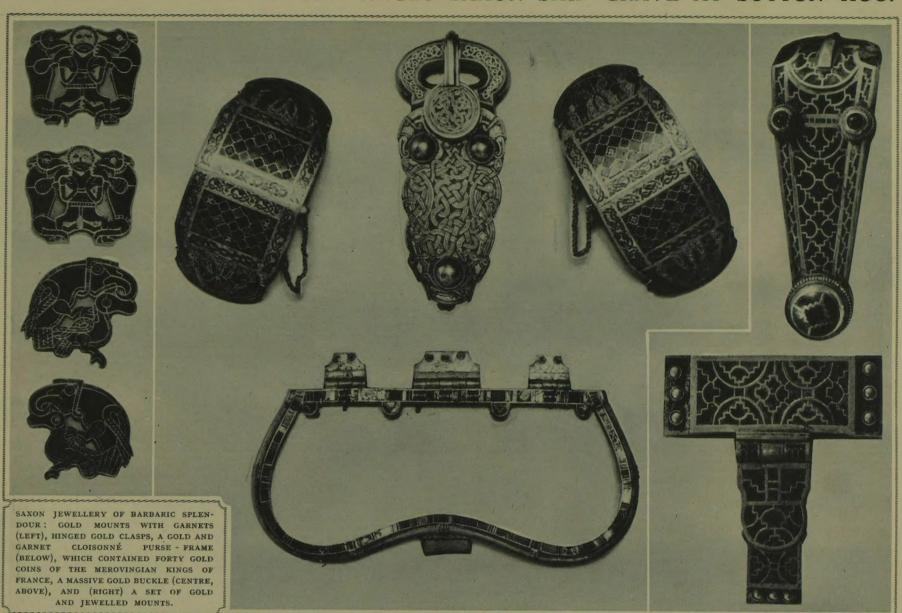


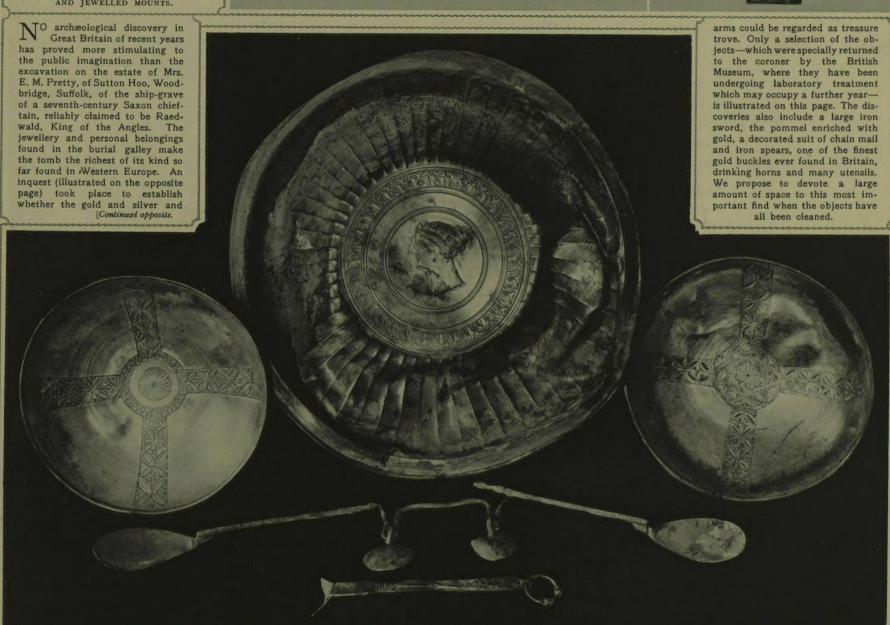
PRECURSOR OF THE VIKING SHIPS—AND THE FIRST SAXON BURIAL GALLEY FOUND IN ENGLAND: A REMARKABLY CLEAR VIEW OF THE SHAPE OF THE LONG CURVED PROW OF THE VESSEL, AS PLAIN AS IF MOULDED, SHOWING THE STOUT RIBS AND THE TRACES OF BOLTS. (Keystone.)

On August 14, in the local hall of the Suffolk village of Sutton Hoo, near Woodbridge, Mr. L. H. Vulliamy, Coroner for the Parish of Bromeswell, conducted an inquest on the gold and silver articles found in the tumulus of an Anglo-Saxon chieftain on the estate of Mrs. Pretty. The chieftain is now widely believed to have been Raedwald, King of the Angles, and the first of the East Anglian Royal Family to become High King of England. The jury, empanelled to decide if the precious objects discovered were claimable by the Crown as treasure-trove, was widely representative of country life, its fourteen members including retired Army officers, farmers, a bank manager, a publican, a golf club secretary, a haulage contractor, a grocer, a land agent, the

village blacksmith, and a school-teacher. Evidence was given by Mr. C. W. Phillips, Fellow of Selwyn College, Cambridge, who declared that it was impossible that the burial of such a prominent leader of seventh-century Angle-land could have taken place in secrecy. He said that after the body had been covered over in the trench, a large mound was erected over the whole, containing at least 1000 tons of turf cut from a surrounding heath. After retiring for twenty minutes to consider their verdict, the jury found that the articles were not treasure-trove, and that Mrs. Pretty was the legal finder. The silver objects in the find are particularly fine, the most outstanding ones being illustrated on the opposite page.

WONDERFUL "FINDS" IN THE ANGLO-SAXON SHIP-GRAVE AT SUTTON HOO.





THE MOST IMPRESSIVE FEATURE OF THE SUTTON HOO ANGLO-SAXON TREASURE: PROVINCIAL BYZANTINE PLATE, INCLUDING A MAGNIFICENT SILVER DISH, 28 IN. ACROSS (BEARING MARKS OF THE REIGN OF THE EMPEROR ANASTASIUS I.), TWO SMALLER DISHES, SILVER SPOONS, AND A SILVER LADLE-HANDLE WITH RING (BELOW.)

THE TOKYO CONFERENCES BETWEEN THE JAPANESE FOREION MINISTER, ME. ANTA [LET], AND SER ROBERT CHARILE, THE BRITISH AND SER ANALYSIS OF SERVICE OF THE SERVICE

MEN OF THE MOMENT IN THREE CONTINENTS:

A WEEK OF INTERNATIONAL COMINGS AND GOINGS, SPEECHES AND CONFERENCES WATCHED BY A TENSE WORLD.



PRESIDENT CARMONA OF PORTUGAL IN AFRICA: TAKING THE SALUTE AT A MARCH-PAST OF SIDENT CANDONA OF PORTUGAL IN APPLICA: TAKING THE SALUTE AT A MARCH-MAST OF PORTUGUESE COLONIAL TROOPS, DURING HIS TOUR OF THE PORTUGUESE COLONIAL TROOPS, DURING HIS TOUR OF THE PORTUGUESE COLONISEL of company of the Portuguese Republic, originally arrived at Lourence Marques, the capital regions, President of the Portuguese Republic, originally arrived at Lourence Marques, the capital regions, President of the Portuguese Republic, originally arrived at Lourence Marques, the capital regions arrived at Pretoris, he was welcomed on behalf of the King by the Covernor-General, Sir Patrick, Duncan, and by General Hertuze, the Prime Minister, to aball of the United Overnment. (Lebessel).





FRANCO WITH THE MEMBERS OF HIS PEACE-TIME CARINET, IN WHICH THE FARCIST FALANGE DOMINATES; set of the new Southin Cabinet are seen in the above photograph; (seated) (1. to 1.) Chernity Rapie (Arr) and Varial of the peace of the control of the Palance, (Morent Places, Stefer Cariner), Vice-Admiral Morrow (Marios), Central Moleco Cretary-General of the Falance, (Assert Places), Stefer Cariner, (Assert Places), Stefer Stefer (Intelligence), Selfer Stefer (Intelligence), Stefer Stefer (Intelligence), Stefer Stefer (Intelligence), Selfer Stefer (Intelligence),













AN "AXIS" CONFERENCE AT BERCHTESCADEN, WHERE DANIG WAS DISCUSSED.

(L. TO R.) HERE VON HIBBENTROP, HERE HITLER, AND COUNT CLAND,

Official commissive was insured after Count Cland, or selected conversations with

Herr Hitler and Herr von Hübbentrop at Berchtesgelen. That they were not arranged

her Fridge (August 11), coupled with Herr Hitler Avariege son Dr. Bucklardt, the

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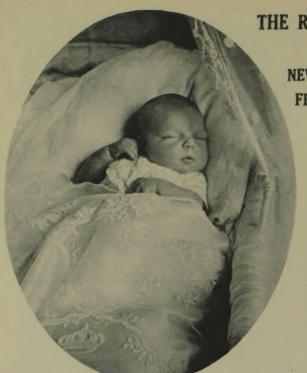
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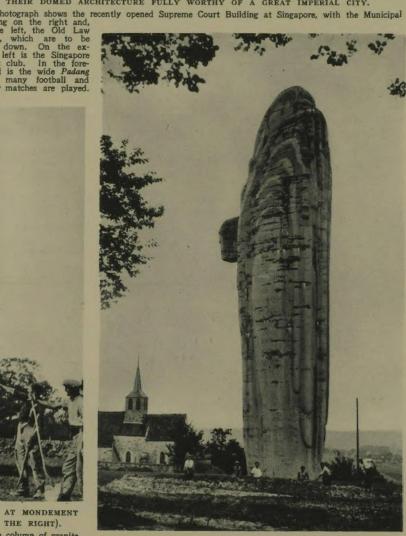
THE LATEST SCION OF THE ROYAL HOUSE OF THE NETHERLANDS; PRINCESS JULIANA'S TWO-WEEK-OLD DAUGHTER—PHOTOGRAPHED BY PRINCE BERNHARD.

THE ROVING CAMERA ABROAD: **NEWS PHOTOGRAPHS** FROM MANY LANDS AND CLIMES.

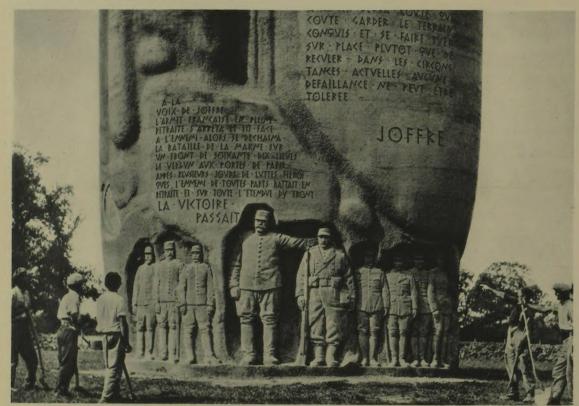
Princess Irene, the new daughter of Princess Juliana and Prince Bernhard, was born on August 5, at 1 a.m., and at 7 a.m. the people of The Hague heard the boom of the 51 guns saluting the event. The Crown Princess's first daughter, Princess Beatrix, was born on January 31 last year. Our photograph was taken by Prince Bernhard, a keen photographer. It is now nearly ninety years since a male heir was born to the Royal House of Holland. (Associated Press.)



IMPRESSIVE NEW SUPREME COURT BUILDINGS RECENTLY OPENED AT SINGAPORE—THEIR DOMED ARCHITECTURE FULLY WORTHY OF A GREAT IMPERIAL CITY.



THE MARNE MEMORIAL TOWERING OVER A HUNDRED FEET; ERECTED AT MONDEMENT, THE SCENE OF A CRITICAL STRUGGLE BETWEEN FOCH'S AND BÜLOW'S TROOPS.



MEMORIAL COMMEMORATING THE VICTORY OF THE MARNE, TO BE INAUGURATED AT MONDEMENT

NEXT MONTH: THE FIGURES AT THE BASE INCLUDING SIR JOHN FRENCH (THIRD FROM THE RIGHT). correspondent who sends these photographs writes that the Monument of the Battle of the Marne, an immense column of granite er a hundred feet high, erected on the heights of Mondement on the extreme edge of the Plateau de la Brie, is to be usuarated at the beginning of next month. It is the work of the architect, Bigot, and the sculptor, Bouchard. The relief viring on the foot of the monument shows Marshal Joffre, "le père Joffre," with his hand on the shoulder of the poilu; and the ures of the victorious commanders at the Marne, Langle de Cary, Sarrail, Foch, Franchet d'Esperey, Maunoury, Gallieni, and of Sir John French (seen third from right). (Sport and General.)



ADMIRAL HORTHY OPENING THE FIRST WORLD GIRL GUIDE GATHERING HELD IN HUNGARY:

A PICTURESQUE CONTINGENT FROM ESTHONIA MARCHING PAST THE REGENT (CENTRE).

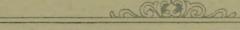
The first World Girl Guide Cathering ever to be held took place recently in Hungary, between July 25 and August 7. Six thousand girls from twenty-six countries attended the gathering, which was officially "opened" on July 30 by the Hungarian Regent, Admiral Nicholas Horthy de Nagybanya. There are approximately 1,340,000 Guides in the world, of whom 526.000 inhabit his country. The movement was organised in 1910 by Sir Robert Baden-Powell, the Chief Scout. In principal the movement is identical to the Scouts, the only difference being in details of training. (Mondiale.)



WATTEAU'S "L'INDIFFÉRENT" RETURNED BY A YOUNG ARTIST, S. BOGOUSSLAVSKY,
WHO SAID HE HAD TAKEN IT FROM THE LOUVRE FOR "LOVE OF ART."

On August 14 Watteau's "L'Indifférent," stolen from the Louvre on June 11, was brought to the Paris Ministry of Justice under the arm of a twenty-five-year-old artist named Serge Bogouss-lavsky, attended by four well-known lawyers. Bogousslavsky was quoted as saying that he took the picture for "love of art," his reason being the bad way in which it had been restored; that there were details in the picture which were not by Watteau, notably the diabolo; and that he wished to rectify this. He was committed to the Santé prison on a charge of theft. (Planet.)





THE WORLD OF SCIENCE.



er Carana

"LEND ME YOUR EARS."

By W. P. PYCRAFT, F.Z.S., Author of "Camouflage in Nature," "The Courtship of Animals," "Random Gleanings from Nature's Fields," etc.

A SHORT time ago, it may be remembered, I had something to say about the enormous ears of the long-eared bat (Fig. 1), which are almost as long as the body. This, very naturally, caught the attention of one of my readers, who has asked me whether I can account for this curious fact. It had not occurred to me when I was writing that it needed an explanation. But it certainly does, though, at the moment, I can only offer a surmise.

Most of us, surely, will remember the comment of Little Red Riding Hood when she found a wolf, in the guise of her grandmother, in bed: "What large ears you

I. PROVIDING A STRIKING COMPARISON WITH THE HUGE EARS OF THE LOP-EARED RABBIT ON THE ONE HAND, AND THE TINY VESTIGE REMAINING IN THE EARED SEAL ON THE OTHER: THE LONG-EARED BAT (PLECOTUS AURITUS), WHOSE ENORMOUS EARS ARE RELATIVELY LARGER THAN IN ANY OTHER MAMMAL.

In this animal the ears (1½ in.) are nearly as long as the body. No satisfactory explanation of their great size has yet been given, though it may perhaps be regarded as a "secondary sexual character." comparable to the excessively developed plumage of some birds.

has yet been given, though it may perhaps be regarded as a "secondary sexual character," comparable to the excessively developed plumage of some birds.

have got!" The instant response was, "All the better to hear with!" That would seem, even to-day, a perfectly satisfactory answer. A little reflection, however, will show that it is not so, though large ears are commonly associated with acuity of hearing.

But let me begin at the beginning in endeavouring to solve this problem. In the first place, "ears"—that is to say, the semitubular outgrowths of the head, so conspicuous in the hare, the rabbit, and the ass—did not come into being until the advent into the world of those hair-covered creatures, with a four-chambered heart, warm blood, and milk-secreting, which we call the "mammals." For the birds and the reptiles have no "ears." In them the true "ear" lies within the head, and gives evidence of its existence only in an oblong aperture in the side of the head behind the eye. What started the growth around this aperture of the sound-collecting apparatus projecting from the head which we call the "ear" we cannot say. But the rudiments having started, they continue to increase in size, as well as to vary their form, in accordance with the nature and force of the stimuli they receive from without. For it is obvious that there was some determining factor in their development, since the aperture of this "ear-trumpet" always turns forward and, not only this, it can be turned outwardly or sideways to catch sounds from these two main directions. In some animals they can be drawn backwards, but then to express emotions either of fear or anger, and not to concentrate sounds.

In attempting to account for the size of this external ear we have to walk warily. They are certainly conspicuously large in animals which show a quick response

to sounds, turning the head rapidly towards the source of the sound, or sometimes the ear only, as, for example, in the horse. But why is it so much larger in the ass than in the horse, and in Grevey's zebra than in all the other zebras? Compare again the enormous ears of the Fennec fox with those of the common fox. I may be told that this difference is easily explained because these two animals live in environments as different as can well be imagined. This may be so, but let us remember that the fox lives in coverts where sound is of necessity more or less intercepted, while the Fennec fox lives in open deserts where sound travels easily. Again, in turning to the apes and monkeys, we find conspicuous differences in the size of the ear which are difficult to account for. Compare, for example, the enormous ears of the chimpanzee with those of the gorilla and orang. And in these creatures, too, we find another and a very marked change in the shape of the ear, for it is lobe-shaped, lies flat to the side of the head, and has quite characteristic folds and ridges which attain to their fullest development in the human ear. What has governed this shape and the progressive stages in its development?

Finally, on this theme of the size of the ear, what is to be said of the Indian and African elephants? Herein the ears lie close to the side of the head, but biggame hunters have given us graphic descriptions of the way in which they can be turned forwards when to sounds, turning the head rapidly towards the source of

can be turned forwards when alarmed and anxious to find out whence sus-picion - raising sounds are comsounds are coming, as we ourselves place the half-closed hand behind the ear and thrust it forward when "hard of hearing." But why are they so vastly larger in vastly larger in the African elephant? And even here they are conspic-uously larger in

It is probrange in size has any functional significance.

range in size has any functional significance. It is probably no more than a "secondary sexual character," comparable to the excessive growth of "ornamental" plumage, such as in the peacock among the birds. Both Indian and African elephants are "jungle-haunting" animals, and the conditions governing sound cannot differ so much in these two areas as to account for the surprising difference in the form and size of their ears.

Domesticated animals present us with some interesting aspects on this theme of the excessive growth which ears may attain to. And here "function" may be at once dismissed as an agency in its causation. In the wild boar, for example, the ears are small, but in some domesticated races they droop forwards and attain to such a huge size as to overhang the face and eyes and bring about blindness! This great size has come about by the agency of "selection" on the part of the breeder. But even so, the initial stages in this development must have been due to an "inherent tendency" correlated with some other and mysterious "growth-force" peculiar to this breed.

And we find this same proneness to develop ears of enormous size in those domesticated breeds of rabbits known as the "lop-eared" (Fig. 2). Herein the ears are no longer erect, as in the wild rabbit, but hang downwards and trail on the ground! Some idea of the extent to which this



hypertrophied growth may attain is shown in the accompanying photograph. In the wild animals such ears could not possibly come into being, since they would impede movement not only in feeding, but in endeavouring to escape from enemies. Here again the breeder found this tendency inherent in the breed and

this tendency inherent in the breed and fostered it.

In all the wild dogs the ears are upright, and may, as in the Fennec fox, attain to a large size, but in domesticated races the ear, if upright, has the tip turned downwards, but in most breeds they hang down on each side of the head, though this does not seem to impair their hearing. Time and again I have marvelled at the instant response my little cocker spaniel makes to sounds quite inaudible to myself. To still further aid her at such times, she slightly lifts her ears so that they move a little outwards.

Finally, something must be said of the many tribes of animals which show no trace of external ears. In all such cases they have vanished because their function gradually fell into abeyance. They disappear from lack of "use" and mere inanition. The last traces of such a disappearance are well shown in the "eared seals" (Fig. 3), wherein all that is left of the ear is a mere vestige. In all the rest of the seal tribe only a small hole in the side of the head marks the passage to the internal ear. In the whale tribe this aperture often has to be sought for with a lens, and a bristle can by no means easily be thrust down it. The moles and the duck-bill platypus, among land animals, are in like case.

The complete loss of all traces of this ex-

ches, and a land animals, are in like case.

The complete loss of all traces of this external ear shows us very certainly that some sort of an "ear-trumpet" came into being wherever sound resulted in stimulating the tissues surrounding the aperture to the internal ear, though it leaves us "in the dark" as to the reasons for its great range of variations in regard to its size.



THE ONLY MEMBER OF THE SEAL TRIBE IN WHICH ANY SIGN OF AN EAR REMAINS: THE EARED SEAL, WHEREIN ALL THAT IS LEFT OF THE EAR IS A MERE VESTIGE. In all the rest of the seal tribe only a small hole in the side of the head marks the passage to the internal ear. In the whale tribe this aperture often has to be sought for with a lens, and a bristle can by no means easily be thrust down it. (Photograph by E. Pedder.)

some geographical races than in others. In the elephant of Abyssinia and the Sudan the ear may measure, in vertical height, as much as 6 ft. 5 in.! In other races they range from a little over 4 ft. to 5 ft. in height. But we have no evidence as to whether this

BOOKS THE OF DAY.

IN these kaleidoscopic times, it is a drawback to books about current affairs and the international situation that, by the time they reach the public, the ground of their argument may have been largely altered by events. I have received so many such works that full discussion of them all (and of others probably still to come) would occupy this page for worths to the about the country this page for worths.

discussion of them all (and of others probably still to come) would occupy this page for months, to the exclusion of works on any other subject. The fairest plans seems to be to select a few for comment and give a list of the rest, from which readers can make their own choice. It would be interesting to know, by the way, what arrangements are made for books of this type, which often contain matter of high national importance, to be studied by the authorities. Presumably each Government Department has properly qualified readers whose duty it is to sift the grain from the chaft, and report the results, so that everything of real value may reach the highest quarters. value may reach the highest quarters.

Prominent among recent works sure to receive attention from the powers that be is "The Defence of Britain." By Liddell Hart (Faber; 12s. 6d.). Here the distinguished military critic and historian explores the whole position, discussing such questions as the conditions and methods of defence, the situation before and after Munich, the possibility of Britain being invaded, and the limitation of air warfare. One section of the book is concerned with the defence of France, the Netherlands, and Switzerland; another with the reorganisation of the British Army and the expansion of the Territorial Force.

Captain Liddell Hart is not an alarmist; neither is he unduly optimistic. He surveys the ground calmly with the eye of a practised soldier. This is how he begins: "The question everyone asks is to-day: 'Will there be war?' That question trays nerves and consumes energy without any compensating value. It is more useful to ask: 'Can war be averted?' Put in that form the question is an incentive to effort. . . . From this nightmare I believe that there is a chance of release." Elsewhere the author declares: "War will only be ended when the power-lusting nations recognise its futility. The Captain Liddell Hart is War will only be ended when the power-lusting nations recognise its futility. The growing power of modern defence is bringing that prospect in sight. But there is a grave danger that the nations of Europe may end themselves before they ee it. The chief hope for our civilisation lies in nobody winning the next war. Or, better still, in everybody being brought realise beforehand that it cannot be

While the author's outlook is military, and his book is obviously addressed mainly to administrators and leaders of the fighting services, much of it is of vital interest to civilians. Regarding air raids, for example, he writes: "The difficulty of a 'knock-out blow' is greatly increased by the modern superiority of difficulty of a 'knock-out blow' is greatly increased by the modern superiority of defence over attack. That is already established on land. . . And now in the air, also, the defence appears to be overtaking the advantage that the attacker formerly enjoyed. New developments in the technique of anti-aircraft fire are giving promise of providing an obstacle to the air menace similar to that created a generation ago in land warfare by the combination of barbed wire and the entreuched machine-gun. Thus, in sum, the soldier's dream of the 'lightning war' has a decreasing prospect of fulfilment. The war clouds which hang over Europe to-day produce a lot of thunder, but much less lightning."

Another book that will doubtless be duly considered in Government circles is "SECURITY—CAN WE RETRIEVE IT?" By Sir Arthur Salter, M.P. (Macmillan; 8s, 6d.).

"Security—Can We Retrieve It?" By above the ruins Sir Arthur Salter; M.P. (Macmillan; 8s, 6d.). Explaining its purpose, Sir Arthur recalls his previous volume, "Recovery: The Second Effort," published seven years ago, and the changes brought about by subsequent events, especially the advent of the Nazi regime in Germany, "one of the turning-points in world history." The main questions he now discusses are—"Is war inevitable? What course of policy offers the best hope of averting it, and at the same time of preserving what is most valuable in the heritage of our civilisation? Is the League of Nations still an instrument of peace or has it become a source of peril?... Can we rebuild it? If so, how and upon what principles?" His object has been (in his own words) "to present a picture of the ... general situation as I see it, and of a general policy to meet it.... The book is in five main Parts. The first attempts to assess the Peril and the Prospect that now confront us... The second is a study of the evolution of the League of Nations... The third deals with the question of our own National Strength... The fourth advocates in outline a constructive policy for a New Foundation of Peace. The fifth is in the nature of a summary of conclusions."

By CHARLES E. BYLES.

Sir Arthur Salter does not neglect the personal side of politics. He has an interesting chapter on Mr. Chamberlain as Prime Minister, and another estimating the work of Lord Baldwin, Mr. Hore-Belisha, Sir Kingsley Wood, Sir John Simon, Sir Samuel Hoare, and Sir Thomas Inskip. Among impersonal chapters some of the most notable are those on the new grouping of Powers, the basis of a general settlement, and that suggesting a draft manifesto of British policy. So far-reaching a survey can hardly be summarised in a few words, but the point that Sir Arthur most stresses in conclusion is that "the free democracies of the world... need...the will to act—and to act together." Again, in his chapter entitled "The Defence of Democracies: Summary," he declares: "We must seek ever to rebuild the foundations of a collective security, whether through the reconstruction of the League... or with a further development into some form of federation of free States." Sir Arthur Salter does not neglect the personal side of

This last suggestion serves to introduce a remarkable American work—"UNION NOW," by Clarence K. Streit (Cape; 10s. 6d.)—which proposes and describes in detail



LENDING A NIW MAGIC TO POMPEH'S "FROZEN HISTORY": THE COLONNADE OF THE MARKET-PLACE OF THE ANCIENT ROMAN CITY, WHICH LAY BURIED FOR CENTURIES, ILLUMINATED BY 50,000-CANDLE-POWER "FLOODS."

Pompeii, buried for 2000 years beneath the ashes of Vesuvius, is now illuminated at night by 50,000-candle-power flood-lights. Entering the city by the Porta Marina, the ruins appear in an orange glow; while the Temple of Venus is outlined in azure and amethyst. Recently the Prince and Princess of Piedmont inaugurated a series of concerts held in the ancient theatre built into the side of a hill—and above the ruins of the city floated the strains of Beethoven's "Coriolanus." (Photograph by Courtesy of E.N.I.T.)

a vast and daring scheme for the preservation of democracies, which amounts to nothing less than the amalgamation, for certain purposes, of the United States, the British Empire, France, and other democratic nations. In recommending this grandiose plan the author writes: "I believe it will lead us through in time to avoid catastrophe if only we make the most of the brief respite gained at Munich to agree to set out on it without delay. The way through is Union now of the democracies that the North Atlantic and a thousand other things already unite—Union of these few peoples in a great federal republic built on and for the thing they share most, their common democratic principle of Government for the take of interdual freedom. This Union would be designed (a) to provide effective common government in our democratic world in those fields where such common government will clearly serve man's freedom better than separate governments; (b) to maintain independent national governments in all other fields where such government will best serve man's freedom; and (c) to create by its constitution a nucleus world government capable of growing into universal world government."

the component

the component parts of the suggested federation, Mr. Streit says later: "In the North Atlantic or founder democracies I would include ... the American Union, the British Commonwealth (specifically the United Kingdom, the Federal Dominion of Canada, the Commonwealth of Australia, the Union of South Africa, Ireland), the French Republic, the Netherlands, the Swiss Confederation, Denmark, Norway, Sweden and Finland.... Their combined citizenry of nearly 300,000,000 is well balanced, half in Europe and half overseas. None of these democracies has been at war with any of the others since more than 100 years.... The Union's existing and potential power from the outset would be so gigantic that Germany Italy and Japan even put together could no more dream of attacking it than Mexico dreams of invading the American Union now."

This Union of the Free, as visualised by Mr. Streit, is certainly on the grand scale of political world-planning. Popularly speaking, it is a large order, and easier said than done. Its actual magnitude, however, need not make it inherently impossible, and something of the sort might come about through the pressure of events, which have already moved some way since the book appeared. We in this country would want to know that we should not be asked to abandon any of our cherished traditions and institutions, but on this point the author is reassuring. With regard to monarchy, for instance, he explains:

"Clearly the individual freedom of Americans or Frenchmen would gain nothing from cans or Frenchmen would gain nothing from making Union depend on the British converting the United Kingdom into a republic. Nor would the British be freer for making Union depend on the Americans and French changing to a monarchy." The author carefully distinguishes between a union with the individual man as its unit. author carefully distinguishes between a union, with the individual man as its unit, and a league, with the State as unit. The league system he utterly rejects. "Had a strong government of the democracies been created in 1919," he declares, "instead of the League of Nations, there would never have been a Fascist or a Nazi state, and probably democracy would rule Japan to-day."

> As promised, I now append a library list of other books bearing on the European scene. Two notable revivals of previous other books bearing on the Emopean scene. Two notable revivals of previous utterances are a collection of speeches by an ex-Foreign Secretary—"Foreign Affairs." By the Right Hon. Anthony Eden, M.P. (Faber; 128. 6d.), and a new and revised edition of a famous war correspondent's well-known book, "Across the Frontiers." By Philip Gibbs (Michael Joseph; 5s.). Incidentally, Sir Philip stresses the menace of Japan and quotes urgent advice to the European nations to stand together. Two books of special interest in connection with the Danzig question are "Poland: Key to Europe," by Raymond Leslie Buell (Cape; 10s. 6d.), and "Towns and People of Modern Poland," by Robert McBride. Illustrations and Maps (Jatrolds; 10s. 6d.). The unfortunate Republic whose fate was involved in the Munich Agreement and subsequent German action has inspired a trio of books certain to command attention—namely, certain to command attention—namely, "Eye-Witness'in Czecho-Slovakia," by "EYE-WITNESS IN CZECHO-SLOVAKIA," by Alexander Henderson (Harrap; 10s. 6d.); "THE LOST LEGION." A Czechoslovakian Ipic. By Gustav Becvar, M.C. With 24 Illustrations (Stanley Paul; 10s. 6d.); and "WE SHALL LIVE AGAIN." By Maurice Hindus (Collins; 12s. 6d.). Two other works are devoted to particular countries—namely, "The Keystone of Europe." History of the Belgian Dynasty, 1830-1939. By Emile Cammaerts. Illustrated (Peter Davies; 15s.), and a new volume in the Ambassadors at Large Series, "ITALY." By C. Pellizzi, Professor of Italian at London University (Longmans; 6s.). London University (Longmans; 6s.).

The tale of "tension" books is even now not ended! Here is yet another batch of books not restricted to any one country but dealing with the state of affairs on the Continent generally. They are—"Foreign Correspondent." Personal Adventures Abroad in Search of News. By Twelve British Journalists. Edited by Wilfrid Hindle (Harrap; 10s. 6d.); "Europe on the Eve." The Crises of Diplomacy, 1933-1939. By Frederick L. Schuman, author of "Hitler and the Nazi Dictatorship" (Hale; 18s.); "The Eleventh Hour." By Vincent Sheean (Hamish Hamilton; 10s. 6d.); "The Labyrinth of Europe." By Michael Burn (Methuen; 12s. 6d.); "Peace With Gangesters?" By George Glasgow (Cape; 7s. 6d.); "Diplomacy." By Harold Nicolson (Butterworth; 5s.); and "War and Peace." Essays in Psychological Analysis, By William Brown, Wilde Reader in Mental Philosophy at Oxford, Major, late R.A.M.C. (Black; 5s.). Six books concerned solely with Germany I reserve for a later article. May we hope that, as stated in the 14th verse of the 11th Chapter of the Book of Proverbs, "In the multitude of counsellors there is safety"? The tale of "tension" books is even now not ended!

AERIAL PHOTOGRAPHY BY NIGHT: AN AID TO THE NOCTURNAL BOMBER.



THE PROCESS OF AERIAL NIGHT PHOTOGRAPHY: A DRAWING SHOWING THE LUMINOUS "BOMB" BEING DROPPED, ATTACHED TO A PARACHUTE WHICH, AFTER A CALCULATED INTERVAL, OPENS; THIS CAUSES THE "BOMB" TO "EXPLODE"; AND THE LIGHT STARTS THE MECHANISM OF THE CAMERA (SHOWN, DIAGRAMMATICALLY, IN THE BOMBER).



AN EXAMPLE OF AERIAL NIGHT PHOTOGRAPHY—A PHOTOGRAPH TAKEN AT 9.30 P.M. FROM A HEIGHT OF 1600 FEET WITH THE FAIRCHILD AERIAL NIGHT CAMERA: THE SAN DIEGO (CALIFORNIA) EXHIBITION FROM AN OBLIQUE ANGLE.

NIGHT is no longer an obstacle to air photography as these illustrations show. Such a development has obvious bearings on A.R.P., and the question of the effectiveness of "black-outs" in large cities. The methods with which the photographs on this page were taken—by the U.S. Army Air Corps, which has been experimenting, in collaboration with specialised firms, for some twelve years in this field—are not dissimilar in principle from those of ordinary terrestrial night photography. The "flash" is from a "bomb" attached to a parachute, the bomb exploding when the parachute opens. This it does after a period calculated to allow the aeroplane to be both safe from the explosion, and in a good position to take the photograph. The light-rays from the bomb cause a photo-electric cell to operate the camera shutter. The lens has a focal length of 11½ in. and with an aperture of f.3.5, an exposure of 1-25th sec. is made. From a military viewpoint the value of this comparatively new application of photography is obvious. Thus, it will be of assistance in both night bombing and night reconnaissance flights. The luminous bomb may be used alone, to light up the target—as, indeed, it was used in the Spanish war—and to see the results of the raid. Alternatively, an accompanying photograph would provide a more accurate record, both of country reconnoitred, and of a raid accomplished. For news photography the value is equally obvious: pictures of dramatic events which might occur at night, such as shipwrecks and accidents, being in this manner easily obtainable. (Photographs by the U.S. Flying Corps.)



ILLUSTRATING THE MILITARY POSSIBILITIES OF AERIAL NIGHT PHOTOGRAPHY EITHER FOR BOMBING OR RECONNAISSANCE: A VERTICAL VIEW OF AN AERODROME, SHOWING AS CLEARLY AS IF PHOTOGRAPHED BY DAYLIGHT THE LAY-OUT AND DISPOSITION OF HANGARS AND 'PLANES.

LONDON BEFORE THE BLACK-OUT: A SPECTACLE OF UNEQUALLED BRILLIANCE.

DRAWN BY OUR SPECIAL ARTIST G. H. DAVIS, FROM SKETCHES MADE IN FLIGHT,



AN AERIAL VIEW OF LONDON AT NIGHT, APPEARING LIKE A MAP MADE UP OF TWINKLING STREET LAMPS WITH BRIGHTER CLUSTERS FORMED BY GROUPS OF NEON LIGHTS, RACING-TRACKS AND "SKY-SIGNS."

Seen from the air, London at night with its normal lighting full on is one of the most wonderful sights that human eye can see. Coming up from the south-east over the fields of Kent, flying, perhaps, high above the clouds that shield the earth from view, the pilot puts the nose of his machine down, there is a momentary rush through the fog of cloudland, and then suddenly below appears the wonder of London's lights. Far as the eye can see they stretch away into the hazy distance, millions of tiny dots of varying colours, from the blue-green of the sodium lamps to the varying colours of the neon signs. Through this fairyland curves the Thames, showing dark against the spangled web through which it winds its way. Here and there searchlights light up the clouds that are almost always

over the metropolis. The intense glare of the powerful lights shortens their perspective as seen from the aircraft high above, so that the projectors themselves seem suspended half-way between the aircraft and the ground. The outstanding feature of the night landscape of London is the endless rows of lamps that mark the position of the streets, dim in the smaller streets and bright where the lighted shops add to the illumination. Here and there are brighter spots where some brilliantly lighted dog- or dirt-track is clearly visible, or in the West End, a glowing jewel amongst these other gleaming pin points, or along the brilliantly lighted Thames Embankment. The resultant effect is that of a map made of twinkling dots, from which the pilot can easily read his position.

LONDON BLACKED OUT-A MEANINGLESS JUMBLE OF SCATTERED LIGHTS.

DRAWN BY OUR SPECIAL ARTIST G. H. DAVIS, FROM SKETCHES MADE IN FLIGHT.



LONDON AS IT APPEARED TO "RAIDERS" DURING THE BLACK-OUT—THEIR ONLY GUIDES BEING THE STILL ILLUMINATED RAILWAY TERMINI, AND THE GLARE OF SEARCHLIGHTS REFLECTED IN THE THAMES.

What a contrast to the aerial view of London on any clear night was the impression the bombers had on the night of Thursday, August 10, when London had its first peacetime "black-out." Passing up the river from the estuary, past Dagenham (with one brightly lit factory a very clear mark), past the glowing red globes on the great pylons carrying the electric cables across the river, the incoming raiders were over London without knowing it. Below them lights remained, it is true, but the vast spangled map formed by the street lamps had completely vanished, and all that remained were scattered spots of light in irregular groups, for all the world like the starry heavens on a clear night. There remained, however, the lighted-up termini and goods yards of the railways, with the

shunting engines sending up transparent puffs of steam like tiny mushrooms. Charing Cross Station showed up as two archways of bright lights; Waterloo was plainly visible; and farther north the great termini and the goods yards formed glowing crescents of bright light in the surrounding gloom. The Thames and the docks had completely disappeared, but ever and anon some portion of London's waterway suddenly appeared as a searchlight struck the low clouds, and, reflected downwards on the water, showed up a stretch of the river. Everywhere could be observed crawling twin pin-points of light—motor-cars with their side-lamps on. In time of war things would be far different. As it was, it was almost impossible for the bombers to find their position with any exactness.

ABORIGINAL BUT HIGHLY EFFECTIVE FISHING METHODS USED BY THE NATIVES OF NORTH ARNHEM LAND:

THE "BALING" TECHNIQUE, AND THE USE OF GRASS "NETS" AND WEIRS TO CAPTURE QUANTITIES OF DELICIOUS BIYAI AND BARRAMUNDI.



2. THE 2-FT. HOLE DUG AT THE END OF THE CHANNEL, WHICH WHEN BALED CAUSES THE WATER TO FLOW, TAKING WITH IT THE FISH, WHICH ARE CAUGHT IN THE MESH BAG AS THEY COME DOWN THE MINIATURE CHUTE.

technique is employed. The natives dig channels (Fig. 1) through the rushes, some 6 inches wide and extending a considerable distance. These soon fill with water—and fish. A hole, some 2 ft. deep, is then dug at one end (Fig. 2); then, standing astride it (Fig. 3), the fisherman bales out the water with his hands. This causes the water in the channel to flow, taking with it the fish, which are caught in a mesh bag as they come down the miniature chute. A day's work results in a catch of many pounds of small fish. These are skilfully and deliciously cooked. On the charcoal remains of a dry wood fire is placed a bed of green leaves. The fish are laid on this and then covered with a further layer of leaves, and then covered with earth, making a perfect oven. A fishing method of the Gunwingo tribe of the Liverpool River Area is that seen in Fig. 4. In this, communal drives, with both sexes co-operating, sweep the pools with hinged nets. Fine fish, such as barramundi, are taken. In shallow waters of the River Derby district grass barriers are thrown across the pool, as in Fig. 5, and slowly pushed forward by the fishing-party. The fish become entangled in the grass or are driven into the shallows and stranded. A variant of this is seen in Fig. 6, employed in the mangrove-fringed tidal creeks. A grass-covered weir is placed at its sea-end, so that, as the tide ebbs, the creek drains away. The fish, prevented from breaking the barrier by the two fishermen ensconced in the water, are left stranded. (Photographs by Dr. Donald F. Thomson. World Copyright Reserved.)

4. (BELOW) COMMUNAL FISHING BY NATIVES OF THE GUNWINGO TRIBE IN A SALT ARM NEAR THE SEA;
NETS WITH A HINGED FRAME ARE USED, AND FINE FISH SUCH AS BARRAMUNDI ARE TAKEN.





1. THE INGENIOUS "BALING" TECHNIQUE USED IN THE FLOODED COASTAL PLAINS BY THE NATIVES OF NORTH ARNHEM LAND; THE NARROW CHANNEL CONSTRUCTED THROUGH THE RUSHES IN WHICH THE FISH BECOME CONCENTRATED.



3. THE FISHERMAN AT WORK: ASTRIDE THE HOLE AND SCOOPING THE WATER OUT WITH HIS HANDS: WHICH HE THROWS AWAY BETWEEN HIS LEGS—LIKE A DOG DIGGING; THE STICKLEBACK-LIKE FISH CAUGHT BEING CALLED BY YAI BY THE NATIVES.

DR. THOMSON'S researches into the customs and conditions of life among the aborigines of the Northern Territory of Australia have often been illustrated in our pages. Here we reproduce further remarkable methods of fish-capture among the natives of North Central Arnhem Land (an article and photographs by Dr. Thomson on their gorl fish-traps appeared in our issue of July 15). These methods are employed after the rains of the wet season in the flooded coastal plains and salt-pans near the River Derby. A dense growth of rush-like plants exists, which teems with a small fish—called biyai by the natives—in size and appearance like an English stickleback. To catch these biyai, a "baling" [Continued above.]



PRIMITIVE BUT EFFECTIVE METHODS OF FISHING BY THE ARNHEM LAND NATIVES—5. (ABOVE) "NETTING" FLOOD-WATER WITH GRASS BARRIERS WHICH, SLOWLY PUSHED FORWARD, ENTANGLE THE FISH OR LEAVE THEM STRANDED, THEN TO BE PLACED IN THE WOMEN'S BASKETS (CARRIED HERE BY THE FIFTH NATIVE FROM LEFT): FORWARD, ENTANGLE THE FISH OR LEAVE THEM STRANDED, THEN TO BE PLACED IN THE WOMEN'S BASKETS (CARRIED HERE BY THE FIFTH NATIVE FROM LEFT): AND 6. (BELOW) FISHING A TIDAL MANGROVE-FRINGED CREEK WHICH AS THE TIDE EBBS, DRAINS THROUGH THE GRASS-COVERED WEIR, WHILE THE NATIVES IN THE WATER AND 6. (BELOW) FISHING A TIDAL MANGROVE-FRINGED CREEK WHICH AS THE BARRIER AND THUS ESCAPING TO THE SEA.



conceived, cannot succeed against a determined, well-armed enemy occupying a strong position.

On the other hand, both the air and tanks are essential components, with the infantry and artillery, if an attack on a determined, well-armed enemy occupying a strong position is to succeed

Brigadier-General H. J. Reilly is an authoritative military writer and a soldier with a very distin-guished record. He has seen fighting in Mexico, Asia, and Europe; commanded an artillery regiment, and, later, an infantry brigade in the American Expedi-

tionary Force in France, 1917-19; and was present at the Battle of Warsaw in 1920. and was present at the Battle of Warsaw in 1920. Last year he spent four and a half months in Nationalist Spain, visiting all the active fronts. He saw in action and talked to Spanish and Italian officers and men, German officers and N.C.O.s, and airmen of all three nationalities. Late this spring he visited a number of Balkan countries, as well as Rome and Albania. In Rome he learned the military details of the Albanian expedition from authoritative Italian officers. In Albaniah he talked to foreign eye-witnesses and went over the more important ground. He finds the conclusion inevitable that the fighting in Spain furnished Germany and Italy with battle experience to test the possibility of a "lightning war"; and he considers that the Albanian expedition was a dress rehearsal of the lessons learned in Spain. A pictorial explanation of the technique of the "lightning war" in drawings made by our special artist, from details special artist, from details furnished by General Reilly, will be found upon a succeeding

upon a s double-page. HAVE the lessons the Germans and Italians learned in Spain, and those the Italians learned in Albania, shown them that Europe's Maginot lines cannot
weekent "lightning prevent "lightning waged war" being waged pletion of their Maginot Line pletion of their Maginot Line
caused French fears of a successful surprise attack by the
Germans using "lightning war" to
change into the confidence which
comes from security; though, of course, until
the line is extended to cover the Belgian and
Swiss frontiers, the danger still exists of this line being
outflanked

outflanked.

By building this line, the French furnished indisputable evidence that they have adopted Marshal Pétain's dictum concerning permanent fortifications. Since 1918 on, the Marshal has insisted that, far from the war having shown the day of permanent fortification to be over, it had proved

contrary.

He showed that, where fortifications had failed during

warfare on a large scale similar to that of 1914-18 was an impossibility. They could not produce the millions of trained soldiers necessary. Their only hope was to take advantage somehow of the superior discipline and training of their long-service professional soldiers.

Tanks and aeroplanes were forbidden by the Versailles Treaty. However, it was easier to secretly provide means to make them quickly available than secretly to train large

provide means to make them quickly available than secretly to train large numbers of reservists.

As a consequence, the theory was developed of "lightning war"—the surprise attack of thundering masses of armoured cars, tanks, and mechanised units manned by professional soldiers and supported by clouds of aeroplanes.

The re-adoption of conscription which has once more given Germany a war Army of several million trained soldiers, has not slowed-up the preparation for "lightning warfare." The armoured (Panzer) divisions have been steadily strengthened and increased in number. The roads necessary to enable them to quickly concentrate on any frontier have been mostly completed.

In Italy, the light (Celere) and armoured (Corrazata) divisions are prepared and trained for "lightning war."

In both Germany and Italy, the Air is trained to prepare and support such attacks.

I'ear of "lightning war" has caused a number of nations to fortify their frontiers. This has happened from the Baltic to the Black and Ægean Seas, and in Switzerland.

IS A "LIGHTNING WAR" POSSIBLE IN EUROPE?

THE NEW MILITARY TECHNIQUE EVOLVED BY THE "AXIS" COUNTRIES FROM THE LESSONS OF SPAIN.

By BRIGADIER-GENERAL HENRY J. REILLY, O.R.C., U.S.A. (See also illustration on succeeding double-page.)

Therefore, the question of importance to-day is: Can "lightning war" succeed? Or do the various fortified frontiers make its failure inevitable? What did Spain show? First it is essential to say that, from the Battle of Teruel on—that is, the winter of 1937-38—and the final Catalonian Campaign, the Spanish Civil War was on an entirely different basis from that of 1936 and 1937. During this period it was on a large enough scale, as regards manpower and modern weapons in the air and on the ground,

mined, well-armed enemy occupying a strong position is to succeed. Furthermore, other things being equal, it is reasonable to assume that the side which dominates the air will win. The lessons of Spain for advance and rear-guard work, and the pursuit on an enemy dislodged from his position are:

1. Horsed cavalry with armoured cars and accompanying aeroplanes can prevent such defeated troops, or small detachments unsupported by any considerable amount of artillery, from stopping their advance.

This because the aeroplanes, through their bombs and machine-guns, furnish an effective substitute for the artillery and machine-guns which have difficulty in keeping up with cavalry. Horsed cavalry is particularly useful in a country where there are but few roads.

2. Light and armoured mechanised divisions, with accompanying aeroplanes, can n accompanying aeroplanes, can similarly perform successful advance and rear-guard and pursuit work, with

nd rear-guard and pursuit work, when there are passable roads. The better the roads and the more numerous, the more effective their operations, under such conditions, such a force can advance much more quickly than can horsed cavalry.

Therefore, in advance- and rearguard work, and once the enemy's defensive position is broken through, such forces can carry out

advances and rearguard work, and once the enemy's defensive position is broken through, such forces can carry out lightning war."

What did Albania show? The heart of the matter is that the Albanians had no time to make use of the weapons which their armed forces possessed, both in the hands of troops and ready from boilisation. Also, the time between the landing of the four Italian columns and the appearance of Italian acroplanes, followed by troops in all the centres of population, was so short there was insufficient time to raise the countryside against the invader. Thus the invasion can be characterised as a surprise in time rather than in locality.

In Rome it was learned that General Pariani—who reports only to the Duce—was responsible for this. Other generals wanted to send a force of from 80,000 to 90,000 troops with a force of this size. This to be sure to crush the maximum resistance of which the Albanians were capable.

General Pariani insisted that such a force could only land and advance at a rate which would be too slow to permit of surprising the whole country. He therefore disregarded the advice of his subordinates and sent but 23,000 troops, including fast-moving units of the light divisions. He personally wrote a simple order of but three pages. He called in the commanders of the four columns and gave them their instructions so as to ensure the maximum rapidity of action.

In general, then, it may be said that "lightning war."

In Made only by mechanised forces accompanied by aeroplanes, is not possible in the face of properly organised, determined resistance; but (2) that once a way is opened through such resistance who was a companied of the continuous mobilisation of their for road-net, built to satisfy strategic needs, enables a surprise in time concentration to be carried out. The various fortified frontiers, all boosely called "Maginot Lines." can be divided into two classes:

(1) The French Maginot and German Siegfried Lines. These extend wary for the country through them. They are only

THE TRADITIONAL MOBILE ARM WHICH, IT IS THOUGHT, MIGHT ENJOY A RENAISSANCE, AND PLAY A USEFUL PART IN A "LIGHTNING WAR" IN CONJUNCTION WITH AIRCRAFT: HEAVILY LADEN ITALIAN CAVALRY ADVANCING OVER THE OPEN. (Keystone.)

to furnish important lessons as to the best methods of

waging modern warfare.

One proof is that the reorganisation of the Italian Army now approaching completion is based on these lessons.

For heavy combat, the lessons of this period can be summed-up as follows:

1. (a) The air alone cannot produce decisive results.



ANOTHER LONG-ESTABLISHED TYPE OF MOBILE TROOPS WHICH IS BEING RETAINED IN THE ITALIAN ARMY: CYCLISTS IN A BERSAGLIERI UNIT ON THE MOVE. (Keystone')

(b) However, the air plays a rôle of the greatest importance when used for direct attack with bombs and machineguns on an enemy's position, after a heavy artillery bombardment has silenced the enemy's artillery defence, including anti-aircraft guns.

This because it enables the infantry and tanks to advance on and into the enemy's position with less loss and more certainty of victory than can accompanying artillery fire.

2. (a) Tanks alone, even when in considerable numbers, cannot defeat good infantry determined to hold its position.

(b) Tanks accompanied and protected by infantry advancing on an enemy's position after a heavy artillery and aeroplane bombardment, and aided by diving aeroplanes using machine-guns, are essential to gain victory. In other words, when the enemy has established himself in a strong position, and accepts "knock-down-dragout" combat, tanks and aviation alone are unable to beat him. Therefore, "lightning war," as originally

MASS MOBILITY IN THE ITALIAN ARMY: "LIGHTNING WAR" AT MANŒUVRES.

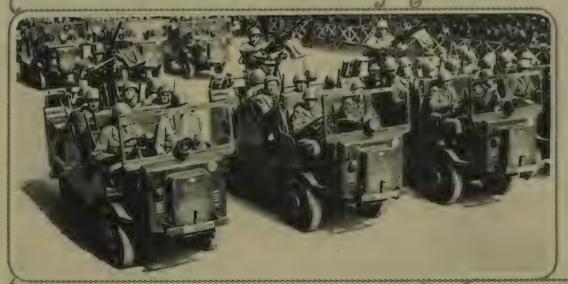




MOTOR-CYCLISTS OF AN ITALIAN LIGHT DIVISION—WHICH IS ADAPTED TO SWIFT MOVEMENT RATHER THAN HEAVY FIGHTING—ON A TEMPORARY BRIDGE DURING THE RECENT GRAND MANŒUVRES. (Wide World.)



ANOTHER SIGN OF THE EXTENT TO WHICH MECHANISATION HAS BEEN CARRIED IN ITALY: A DENSE MASS OF SMALL TRUCKS—IN THIS CASE CARRYING SUPPLIES OR AMMUNITION RESERVES—AND ADAPTED FOR WORK WITH THE VARIOUS ITALIAN "SPECIAL UNITS." (Wide World.)



THE SAME TYPE OF TRUCK IN USE AS A TROOP-CARRIER—SOME BEING EQUIPPED WITH A.A. MACHINE-GUNS; AND TYPICAL OF THE SWARMS OF MOBILE UNITS DESIGNED TO EXPLOIT A BREAK THROUGH WITH A HURRICANE PURSUIT. (Keystone.)



ANOTHER COMPONENT OF THE ITALIAN LIGHT DIVISIONS
DESIGNED FOR RAPID MOVEMENT RATHER THAN HEAVY
FIGHTING: A CAMOUFLAGED ARMOURED CAR. (Keystone.)



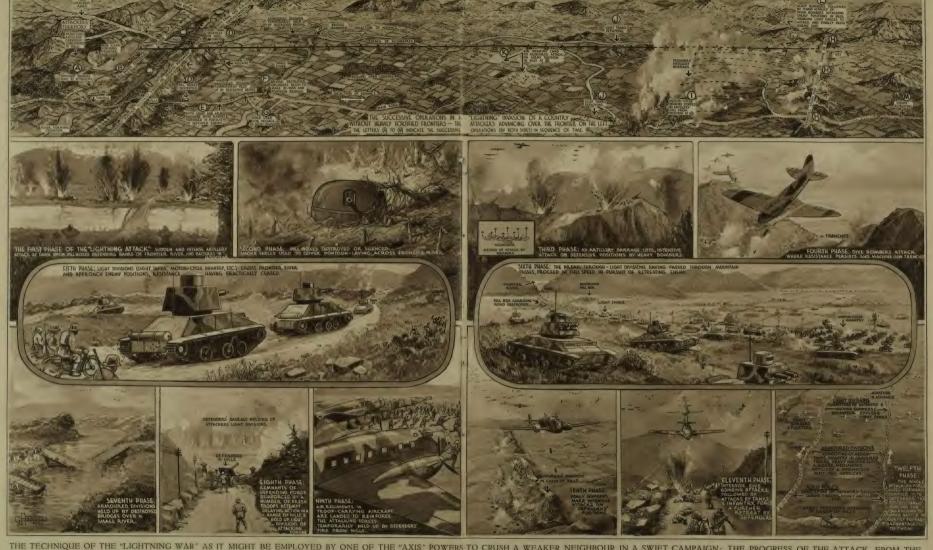
ITALIAN MEDIUM TANKS, COMPONENTS OF THE HEAVIER "ARMOURED" DIVISION: PHOTOGRAPHED AT A COMMAND POST; WITH A SMALL WIRELESS TANK SURMOUNTED BY A TAPERING FLEXIBLE AERIAL SEEN ON THE RIGHT. (Pland.)



THE NEW TYPE OF ITALIAN MEDIUM TANK FOR USE IN THE "ARMOURED" DIVISIONS, WHICH ARE DESIGNED TO HELP OPEN A WAY FOR THE LIGHT DIVISIONS: AN ELEVEN-TON MACHINE ARMED WITH A LIGHT GUN AND MACHINE-GUNS. (Planet.)

These photographs of the Italian large-scale manœuvres in the valley of the Po (of which we gave some scenes in our last issue) provide an admirable illustration of the details of the technique of the "lightning war" described by that eminent American military authority, Brigadier-General Reilly, in his article on the opposite page. This theory of warfare has been evolved by the "Axis" Powers from the lessons of Spain, and there can be very little doubt that the Italian Grand Manœuvres were devoted to testing its details. An Italian official statement preceding the manœuvres ran: "It

is a question of gathering concrete data on the movements of the large specialised unit (the celere—i.e., rapid; the carrazata—i.e., armoured; and the motorised formations) and guides on the rigorous discipline needed for movements of this type." The part to be played by "rapid" or "light" mechanised divisions, heavy "armoured" divisions, and large masses of infantry borne in lorries in a "lightning war" is described by Brigadier-General Reilly in his article, and illustrated in action on the succeeding double-page drawings of "lightning warfare" operations with aircraft.



THE TECHNIQUE OF THE "LIGHTNING WAR" AS IT MIGHT BE EMPLOYED BY ONE OF THE "AXIS" POWERS TO CRUSH A WEAKER NEIGHBOUR IN A SWIFT CAMPAIGN: THE PROGRESS OF THE ATTACK, FROM THE SUDDEN INVASION (LEFT) TO THE FINAL BREAK THROUGH (RIGHT), SHOWN SCHEMATICALLY IN THE LPPER DRAWING, THE LOWER SERIES OF DRAWINGS SHOWING SUCCESSIVE PHASES OF THE OPERATION,

The technique of the Billichrieg, the "lightning war," as set forth by Brig-Gen. Reilly in his article on page 304, is not adapted for use against the was systems of permanent, heavily fortified lines, such as are now in exugence on both sides of the Rhine: but there is no question that it might wisted apply oterory were it utilised by one of the highly equipped "Axis" persons against a weaker nation. Small states cannot afford to keep large Bodies of troops per-Magnot Lines" they cannot afford to keep large Bodies of troops per-lesses. The lightning war "postulates intied surprise at regardle and are also as the state of the state of

shifth, covering a zone of some fifty kilometres deep from the frontier. The lower drawings show in sequence accessive phases of these operations in more detail, as they might appear to military observates of these powers and the sequence of eiteren, (A) to (M). In the upperment drawing given a low of events. At (A) is the frontier river from behind which the attackers auddenly swoop (without, of course, any declaration of way. The contacted pill-boxes creeted along the river banks are heavily shelled and masked by make, while ponteons are thrown across. Infantry and tanks make the way over while the light motorised divisions prepare to cross. The drawing of the Scrool phuse shows the allening of these pill-boxes. At (C) is the main line of resistance, with battery positions and some trenches already prepared, and pill-boxes and tank tray on main roads. But the army to occupy it is still only in process of meballigation and concentration. The drawing of the Tring Hopes shows the meballigation and concentration.

attack on this position by heavy bombers following artillery bombardment. When resistance on this position has been disorganized by this bombardment, dive bombers are sent to settle posts still holding out (frundth phase). While this is going on, the medium tanks and infantry of the light divisions of the men forces (breaght up by motor tusics over the excellent road system in the way for the light motorised divisions consisting of light tanks, motor cyclists and motorised infantry, with light infantry goust to pass through. This is shown happening in the drawing of the Fifth phase. The light divisions, having passed through uniqued, proceed at full speed in pursuit of the retreating enemy. The defenders, of course, blow up the bridges and erect obstacles. The light motorised divisions go across a river by fords (G); the heavier armoured divisions are held up (Neverth phase). Engineers set

country a new defensive position is hurriedly being organised on a chain of hills (H). The artillery in this position holds up the attackers light divisions. (I and J). The drawing of the Highligh phase shows an incident of this fighting seen from the defenders' side. To reinforce the light divisions quickly diance communications have still not been fully recentablished) recourse is had to "ait infantry." Units are flown forward in large transport machines and to "ait infantry." Units are flown forward in large transport machines and handed just out of reach of the defenders' artiller price (K). Meanwhile, at handed just out of reach of the defenders' artiller proposed against the new defensive line (Terms phase). As soon as the proposed against a hurried statement of the defenders of the defen

DRAWN BY OUR SPECIAL ARTIST, G. H. DAVIS, FROM DETAILS SUPPLIED BY BRIGADIER-GENERAL H. J. REILLY, O.R.C., U.S.A.

THE SPEED OF DRIVEN GROUSE CAUGHT BY A SPORTSMAN'S

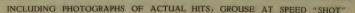










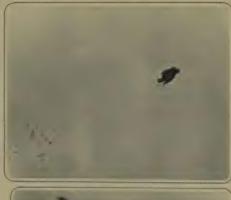


A year or so ago, when shooting at Millen, on the Dalhousie estate near Edsell, Lord Dartmouth armed himself with a miniature camera and took these amazing anasphotus. They convey acutely the tremendous speed of these within its aid to be double that of a reas-horse—which in Its

S OF ACTUAL HITS, GROUSE AT SPEED "SHOT" turn may average 30 miles an hour. More remarkable still, Lord Dartmouth was able to get instantaneous photographs of some binds actually hit, with their feathers flying. Owing to this extreme rapidity the really first-class shot shows his superiority perhaps best when shooting driven grouse, for

CAMERA: "GLORIOUS TWELFTH" PICTURES FROM ANGUS MOORS.









FROM THE BUTTS BY LORD DARTMOUTH WITH A MINIATURE CAMERA.

gets his birds in front of the butt rather than behind. A good bag is about 100 to 150 a day, but some guns get a great many more. As opposed to the guns enthusiasm, the economics of what is virtually a great industry of the Highlands are interesting, for it employs thousands of men. A first-class

grouse moor will cost about £7000 in six to eight weeks' shooting. The owner has to calculate on prospects long before the "Twelfth," and to engage his besters sometimes in the spring. Among those who were in Scotland on the "Twelfth" this year, was H.M. the King, who enjoyed good sport at an informal shoot.

AMAZING DISCOVERIES IN A MYCENAEAN TOMB IN THE PELOPONNESE: **OUEEN'S**

A TREASURE OF SUMPTUOUS GOLD AND SILVER VESSELS, AND BEADS FROM THE FAR BALTIC, DATING 200 YEARS BEFORE THE TROJAN WAR, FOUND AT DENDRA.

By PROFESSOR AXEL W. PERSSON, of Uppsala University, with Photographs supplied by the Author. (See also illustrations on succeeding pages.)

Widespread public interest will be aroused by the remarkable new discoveries made this spring at Dendra, in the upland valley of Berbati, in ancient Argolis, by the Swedish Archaeological Expedition, the chairman of which is his Royal Highness the Crown Prince of Sweden. The latest discoveries at Dendra appear on first sight to rank in importance second only to Dr. Schliemann's epochal recovery in August 1876, of the so-called Treasure of the Pelopids from the royal shaft-tombs at pre-Hellenic Mycenæn. They include things never before found in Mycenæan graves. Fully illustrated accounts of Professor Persson's earlier discoveries at Dendra, particularly of Mycenean graves. Fully illustrated accounts of Professor Persson's earlier discoveries at Dendra, particularly of the "beehive" tomb, in which the famous "King's" Octopus Cup was found, appeared in "The Illustrated London News" of Sept. 18, 1926, and Fcb. 15, 1936.

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AT the end of March this year, a small Swedish archaeological expedition led by me arrived at Smyrna. Our intention was to continue those excavations at Mylassa (situated in the south-west corner of Asia Minor) which were undertaken last year by a committee, with H.R.H. the Crown Prince of Sweden as chairman. But fate had decided otherwise. Owing to the strained political situation—it was shortly before the Italian occupation of Albania—our excavation permit was temporarily suspended by the Turkish War Office, the site being near the coast, and not far from the Italian possession, Dodekanesos. In spite of the fact that other sites were most generously offered by the Turkish authorities, we had to give up the idea of excavating this year in Turkey. After having spent a few weeks conserving the finds from last year's excavations, we transferred our activities, with due permission of the Crown Prince, to the village of Dendra in Greece, a place well known to me from earlier excavations, in 1926, 1927, and 1937.

At this site, a tholos (or beehive) tomb, the now famous Royal Tomb, which contained, inter alia, the so-called octopus cup of pure gold, was excavated by me in 1926. The existence in the neighbourhood of many Mycenzean chamber-tombs, was known to us from previous campaigns, and with the intention of excavating some of these, we applied to the Greek authorities for a new permit, which AT the end of March this year, a small Swedish archae

excavating some of these, we applied to the Greek authorities for a new permit, which was immediately granted. On a hill close to the village, are the ruins of the ancient Midea. Here we made some trial exca-vations, which made it possible vations, which made it possible to locate the old royal palace. We were also able to establish the existence of an extensive and relatively well-preserved settlement dating from the second millennium B.C. A systematic excavation of these remains would doubtless give valuable contributions to our knowledge of the Mycenæan civilisation. civilisation.

civilisation.

We examined in all five tombs, three of which were of exceptional size, and offered much of interest. In Tomb I., which was of a relatively late date, we found a small pit below the floor of the chamber that below the ground an analysis. that had escaped plundering; this pit contained a beautiful collection of bronzes, consisting of knives, swords and cups. Tomb 11, was partially robbed, but proved to be very interesting in the shape and slow. Like

ing in its shape and plan. Like another tomb at this site, exca ted by me in 1937, it was provided with a side chamber. On the floor of the main chamber we found a of the main chamber we found a skeleton in situ, and it was possible to establish that the dead had been buried in a wooden coffin, a mode of interment of which no certain evidence is previously known where the Mycenæan epoch known where the Mycenæan epoch is concerned. Below the body was a beautiful sealstone; at its left elbow, a dagger with gold mountings. At the feet of the skeleton we found a bronze helmet, the first one known from Mycenæan times. Its form suggests that it is a prototype of the so-called Corinthia. type of the so-called Corinthian helmet of the classical period. This tomb also yielded some other objects of bronze and a fine series of vases in terracotta.

of vases in terracotta.

Tomb III. was almost entirely emptied by robbers, but also in this case the architecture was of interest. The chamber is shaped as the negative of a house with ridged roof, the caves being sharply accentuated and the roofing slightly

vaulted. In the wall to the left a niche vaulted. In the wall to the left a niche with a sacrificial table had been cut out of the rock. Tomb V. was of a relatively small size, but yielded a beautiful collection of Late Mycenæan pottery.

There remains Tomb IV. This tomb turned out to be one of the biggest chamber-tombs ever discovered in Greece, and its contents were such

biggest chamber-tombs ever discovered in Greece, and its contents were such that we may well call it a royal sepulchre. Like the others, it had been cut out of the hill slope.

To the chamber leads a dromos, a gently sloping corridor (20 m. long, 5 m. high, and 2.5 m. broad), with walls converging towards the top. After the burial, the door of the chamber had been carefully walled up, and



THE SITE OF THE DISCOVERY OF THE WONDERFUL TREASURES A SKETCH MAP OF ARGOLIS AND NEIGHBOURING AREAS



WITH REMAINS OF THE FIRST WOODEN COFFIN EVER FOUND IN A MYCENÆAN GRAVE: A BURIAL ON THE FLOOR OF THE MAIN CHAMBER IN TOMB 11. AT DENDRA, WITH THE EARLIEST KNOWN MYCENÆAN BRONZE HELMET AT THE FEET.

On the floor of the main chamber in Tomb II., excavated on the site of the ancient necropolis of the Midean sub-kings at Dendra, in Argolis, Professor Person discovered a 3000-year-old skeleton in situ, and established that burial had taken place in a wooden coffin, "a mode of interment," he writes, "of which no certain evidence is previously known where the Mycenæan epoch is concerned."



UNEARTHED IN THE SMALLER PIT OF THE NEWLY-EXCAVATED "ROYAL TOMB" IN THE NECROPOLIS AT DENDRA: ONE OF TWO FINELY WORKED SEALSTONES, HAVING A CENTRAL PERFORATION LINED WITH GOLD, AND DEPICTING, ON ONE SIDE (LEFT), A PAIR OF MOUNTAIN GOATS RESTING, AND (RIGHT) ON THE REVERSE, A LION SEIZING A GOAT.

The reliefs executed on the sealstones found at Dendra this spring by the Swedish Archæological Expedition are claimed to be the finest Mycenæan examples so far unearthed. They provide compelling evidence of the high degree of artistic achievement attained by the goldsmiths of this culture in the second millennium B.C.

the dromos filled with earth, evidently with the double

the dromos filled with earth, evidently with the double purpose of keeping robbers away and preventing the dead from walking. The fact that the blocking of the door was intact proved that, at least this way, no robbers could have entered the tomb. The extraordinary size of the tomb gave us a right to expect rich finds—if it really was untouched. Consequently, it was with great expectations, shared by all our workmen, that we began removing the blocking of the door. But having reached the chamber, we found, much to our disappointment, that it had collapsed, and was entirely filled with earth and lumps of rock. It was a heavy piece of work to clear the chamber, which proved to measure 6.5 by 6 metres. The floor was situated 6.5 m. below the present ground level. The rock being extremely brittle, we were compelled, in order to be able to work in some safety, to line the tomb with logs and thick planks. Our work was also delayed by rains, which were, for the season, unusually persistent.

Just above the floor of the chamber we found many Mycenæan sherds; it was possible afterwards to put together a number of vases, the most beautiful being a jar, about 80 cm. high, decorated in the so-called Palace Style. Near the back wall of the chamber were two pits, and here we could expect to discover the richest finds. In the morning of June 18, we eagerly started the emptying of the pits. Lying on the ground, we dug carefully with our knives, while our Greek workmen removed and sifted the earth. We were soon richly rewarded. The smaller pit, which contained the badly preserved remains of a skeleton, was filled to the brim with earth mixed with coal and ashes, in which golden necklace ornaments soon began to glitter. Gradually, larger objects of gold appeared, and to our satisfaction we found that, in this case, everything that glittered was gold. The biggest object of gold was a finely ornamented cup weighing 100 gr. A signet-ring of solid gold has engraved on its plate an interesting representation of a sacrifice. Eight big evidently decorated a leather belt covered with gold foil. Two big pendants were also found, weighing 21 gr., and consisting of solid ornamented gold rings with a diameter of 6 cm. Inside the ring, a rosette-shaped movable plaque is suspended by means of a gold thread. These ornaments, which are certainly too heavy to have served as earrings, have probably been attached to a band covered with gold foil, worn as an ornament hanging down from the crown of the head. Parallels to this may be observed on certain female statues of Cypriote origin.

More than two hundred gold necklace ornaments were found, belonging to four or five necklaces of different types.

There also were more than one

There also were more than one thousand pearls of glass paste and about one hundred amber ones. These last are of a particular interest, the analysis having proved that the amber is from the Baltin coast. In addition the Baltic coast. In addition to this, we found the remains of objects of ivory, which have not yet been sorted out and classified.

While gold objects are found in the earth still gleaming and unchanged, everything else changes or falls to pieces. Ivories in particular must be handled with the utmost care, handled with the utmost care, and are in great need of conservation. In this pit, two finely worked sealstones were also found. One of them shows a boar, the other, of a prismatic form and having a central perforation lined with gold, has representations on two sides, one of them picturing a pair of wild goats resting, the other, a lion seizing a goat. These sealstones are among the most finely executed Mycenean ones hitherto found.

found,

As stated above, all these objects rested in earth containing a great deal of coal and ashes. Evidently only the gold cup had been actually placed in the pit, whereas all the remaining finds had been pushed down from a pyre, on which the perishable things that accompanied the deceased were burnt. The second pit, wholly reserved for burial gifts, contained several terracotta vases pit, wholly reserved for burial gifts, contained several terracotta vases and no fewer than five silver ones, two of which were inlaid with gold. In one of the silver vessels was a spoon, the only Mycenæan one ever found up to now. One of the others contained a small silver box, the content of which is still a secret. Silver oxidises in earth and becomes extremely fragile and a becomes extremely fragile, and a closer examination of the box will only be possible after special treatment. The same is true of a shallow ivory bowl with an interior lining of gold foil, found in the

same pit.

As far as I am able to judge at present, the pottery of the new tomb is slightly older than that of the Royal Tomb, which dates from c. 1350 B.C. The Queen's Tomb may be preliminarily dated to c. 1400 B.C.

HOW THE GREAT DENDRA TREASURE WAS DISCOVERED: OPENING THE PRE-HOMERIC QUEEN'S TOMB.





THE EXCAVATORS REACH THE ENTRANCE OF THE QUEEN'S TOMB CHAMBER, AND FIND IT UNDISTURBED SINCE PRE-HOMERIC TIMES: THE INTACT WALL BLOCKING THE INNER END OF THE DROMOS. AS IT APPEARED WHEN FIRST DISCOVERED.

WAS FOUND AT DENDRA
IN A ROYAL BURIAL
CHAMBER WHOSE COLLAPSE HAD DEFEATED
THE TOMB ROBBERS OF
THIRTY CENTURIES;
SHOWING (A) GREEK
WORKMEN HELPING TO
EXCAVATE THE QUEEN'S
TOMB; AND (B) THE KING'S
TOMB, DISCOVERED IN
1026.



PROVIDING CERTAIN EVIDENCE OF A VERY LARGE TOMB: THE SLOPING DROMOS WHICH LED THE ARCHÆOLOGISTS TO THE BURIAL CHAMBER ITSELF, THOUGH LEAVING THEM STILL UNCERTAIN WHETHER OR NO THE TOMB HAD BEEN ROBBED IN THE PAST.



THE PROMISE OF TREASURE!—GOLD OBJECTS BEGIN TO CLITTER AMID THE DUST AND ASHES OF THE PIT: THE OBJECTS SEEN INCLUDING A BROKEN ROSETTE OF PURE GOLD, A GOLD PENDANT, AND A MAGNIFICENT GOLD CUP, PERFECTLY PRESERVED.



THE SUPERB GOLDEN DRINKING CUP (WITH HANDLE IDENTICAL WITH THE "KING'S" OCTOPUS GOLD CUP, DISCOVERED IN 1926 IN AN ADJACENT TOMB), AND WITH GOLD ROSETTES AND ORNAMENTS, GLITTERING ON THE GROUND—AFTER THE DÉBRIS HAD BEEN REMOVED.

The site of the Queen's Tomb at Dendra lies but a short motor drive from Nauplia, from whose quiet bay the Achaian contingent captained by Agamemnon, King of Mycenæ, sailed for Troy in the 12th century, B.C. It is situated in the valley of Berbati, in the mountains of Argolis, to the east of Mycenæ, and on the other side of Mount Euboea. The preoccupation of the archæologists was

whether grave-robbers had discovered the site before them. Their anxiety began to be allayed when they reached the tomb chamber itself, found the entrance blocked, and the chamber itself collapsed; and was finally resolved into triumphant exultation as the gold objects began to appear. (Photographs by Courtesy of Professor Axel W. Persson, of Uppsala University, Sweten.)

SILVER FROM DENDRA - WITH THE ONLY MYCENÆAN SPOON KNOWN.



THE DISCOVERY OF A SILVER TREASURE IN THE QUEEN'S TOMB: SHATTERED SILVER AND TERRA-COTTA VESSELS AND VASES BROUGHT TO LIGHT BY THE SWEDISH ARCHÆOLOGICAL EXPEDITION IN THE ANCIENT NECROPOLIS OF MIDEA, WHICH, ACCORDING TO THUCYDIDES, WAS SUBSERVIENT TO THE MYCENÆAN KINGS.

A SHALLOW IVORY BOWL WITH AN INTERIOR LINING OF GOLD FOIL, FOUND IN ONE OF THE SMALLER PITS NEAR THE BACK OF THE TOMB-CHAMBER.



SILVER CUPS (4% INCHES DIAMETER) FROM WHICH THE PRE-HELLENIC LORDS OF MIDEA—WHICH LIES HARD BY THE ANCIENT ROYAL STRONGHOLDS OF TIRYNS AND MYCENÆ—DRANK; FOUND WITH THE TREASURE AT DENDRA.



A LARGE SILVER CRATER (10 $\frac{1}{4}$ INCHES DIAMETER) FOUND WITH THE SILVER TREASURE IN THE ROYAL VAULT AT DENDRA AMID EARTH AND ASHES, EVIDENCE OF A PYRE IN WHICH PERISHABLE OBJECTS WERE BURNED.



containing the first mycenæan spoon ever found in any excavation: a decorated silver vase (4 $\frac{1}{8}$ inches diameter), inlaid with gold round the brim, the spoon appearing as a long thin rod.



A SILVER VASE, INLAID WITH GOLD ON THE RIM $(4\frac{1}{2}$ IN. DIAMETER), CONTAINING A SMALL SILVER BOX, THE CONTENT OF WHICH HAS NOT SO FAR BEEN ASCERTAINED—FOUND WITH THE SILVER TREASURE.

The objects illustrated on this page were found in the second pit, wholly reserved for burial gifts, of Tomb IV., cut out of the hill-slope, which turned out to be one of the biggest chamber-tombs ever discovered in Greece. Its contents were such that Professor Persson felt justified in identifying it as a royal sepulchre, while the complete absence of arms and the rich finds of female adornment left

no doubt that it was a Queen's tomb. The pit contained several terra-cotta vases and no fewer than five silver ones, the latter having become fragile through oxidisation in the earth. In one of the silver boxes was a spoon, the only Mycenæan spoon so far discovered. The gold objects "lay in the earth fresh and glittering as if put there only yesterday." (Photographs by Prof. Axel Persson.)

THE GOLD TREASURE OF DENDRA: THE CUP; AND THE ORNAMENTS.



PART OF THE WONDERFUL GOLD TREASURE FOUND IN THE QUEEN'S TOMB: SOLID GOLD PENDANTS (ACTUAL SIZE) WITH MOVEABLE GOLD PLAQUES, AND A GOLD RING.



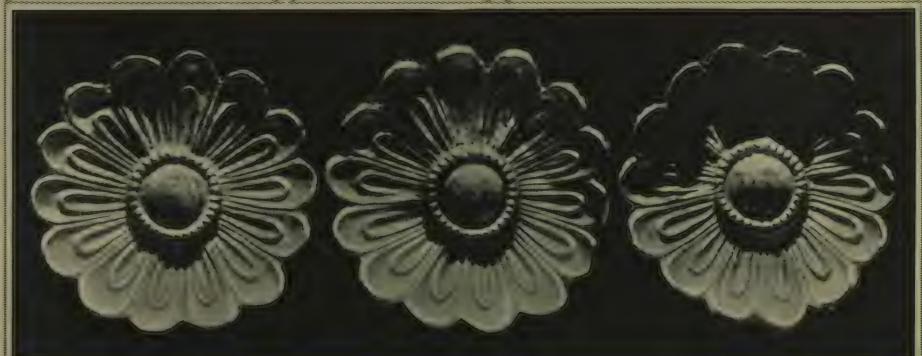
THE CROWNING DISCOVERY IN THE TREASURE YIELDED BY THE QUEEN'S TOMB: THE GOLD CUP (ACTUAL SIZE) IN PERFECT CONDITION AFTER 3000 YEARS, COMPANION TO THE "KING'S" CUP OF PURE GOLD FOUND IN THE "BEEHIVE" TOMB AT DENDRA—SHOWING (LEFT) AN UNDERSIDE VIEW.



FROM THE BIGGEST CHAMBER-TOMB
EVER DISCOVERED IN GREECE: AN
IMPRESSION (ENLARGED) OF THE
SEAL OF A GOLD SIGNET RING.



INCLUDING AMBER BEADS FROM THE BALTIC COAST, THE FIRST EVER DISCOVERED IN MYCENÆAN GREECE: NECKLACES FROM THE ROYAL BURIAL CHAMBER, COMPRISING ALSO 200 SEPARATE GOLD PIECES.

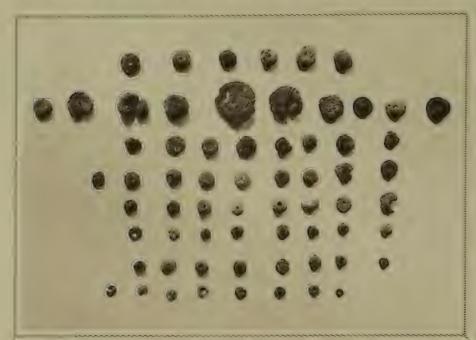


BIG GOLD ROSETTES (ACTUAL SIZE) WHICH PROBABLY DECORATED THE LEATHER BELT, COVERED WITH GOLD FOIL, OF A MYCENÆAN ROYAL PERSONAGE—POSSIBLY THE ROYAL CHAMBERLAIN IN THE PALACE AT MIDEA IN THE MYCENÆAN ARGOLID WHOSE "ABUNDANCE OF GOLD" WAS REFERRED TO BY HOMER.

The celebrated "King's" Cup, decorated with an octopus design, of which the newly-found gold cup illustrated above is a companion, was discovered in the Mycenæan "Beehive" Tomb at Dendra by the Swedish Crown Prince's expedition to Greece in 1926, and was reproduced in the front page of our issue of September 18

of that year. The new treasure of gold, silver, amber and ivory objects excavated by Professor Persson and illustrated in these pages have been dated by him at 1400 B.C., which implies that the Queen was buried about 200 years before the fall of Troy. (Photographs by Prof. Axel Persson.)

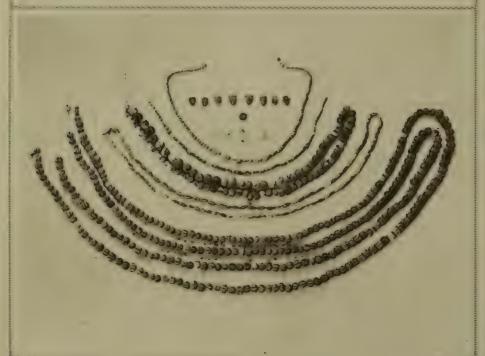
AMBER FROM THE FAR BALTIC: AN AMAZING FIND AT MYCENÆAN DENDRA.



AMBER FROM THE BALTIC COAST IN A PRE-HOMERIC MYCENÆAN GRAVE OF ABOUT 1400 B.C.: A DISCOVERY OF UNIQUE AND POSSIBLY REVOLUTIONARY ARCHÆOLOGICAL INTEREST—OF A SET OF BEADS, THEIR BALTIC ORIGIN BEING PROVED BY ANALYSIS.



BEARING ATTRACTIVE POTTERS' DESIGNS OF FISH-SCALES AND INDIGENOUS ARGIVE PLANTS: GRACEFUL VASES IN USE IN A MYCEN.EAN PALACE HOUSEHOLD.



NECKLACES COMPOSED OF MORE THAN A THOUSAND ORNAMENTS OF GLASS PASTE WERE FOUND WITH THE GOLD, SILVER AND AMBER OBJECTS AMONG THE FUNERARY TREASURE OF THE EARLY MYCENÆAN RULERS OF THE SUB-KINGDOM OF MIDEA.



IDENTIFIED WITH THE MINOAN AND DERIVATIVE MYCENÆAN CIVILISATION:
A BEAUTIFUL FUNERARY JAR, HEIGHT 31½ INCHES, OF THE SO-CALLED PALACE STYLE, NOW IN THE MUSEUM AT NAUPLIA.



FROM A PARTIALLY ROBBED TOMB WHERE BURIAL HAD TAKEN PLACE IN A WOODEN COFFIN (SEE PAGE 310), A HITHERTO UNKNOWN MODE OF MYCENÆAN INTERMENT: A BROKEN VASE, OF THE "PALACE STYLE."

The immensely important nature of the Swedish Archæological Expedition's latest discoveries at Dendra is emphasised by the hundred amber beads, forming part of the Queen's necklaces, which were found in the actual funerary chamber resting in earth containing a great deal of coal and ashes. They had evidently been

pushed down from a pyre on which the perishable things which accompanied the deceased were burnt. "These latter," writes the discoverer, "are of a particular interest, the analysis having proved that the amber is from the Baltic coast."—

Photographs by Professor Axel Persson of Uppsala.

The World of the Kinema.



ASPECTS OF THE LEGION—"SHIPYARD SALLY."

TWO ASPECTS OF THE FOREIGN
LEGION—"SHIPYARD SALLY."

It is thirteen years since the first film version of "Beau Geste" put the French Foreign Legion on the kinematic map and, incidentally, gave the impetus to a spate of Legion literature—fiction and autobiography, partly real and partly imaginative—no less than to an increased enlistment of usually youthful adventurers from the English-speaking peoples. Major P. C. Wren's stories, already well known, achieved immense popularity by that successful adaptation. Thirteen years the wiser, a little disillusioned by the revelations of literary ex-legionnaires, we look back half-indulgently, half-shamefacedly, at the enthusiasm with which we were inspired by those laconic heroes, the three Geste brothers, by the eerie opening scene of Fort Zinderneuf, manned by corpses, by the desperate struggles with the Touaregs, by the Viking's funeral, first enacted by children in play, to be finally re-enacted as-a terrific climax, with a holocaust of the fort itself and its dead defenders. The arresting introduction is unchanged—it could not be bettered in its complete capture of an audience—and the ensuing throw-back plunges one into the heart of the tale, with the children at play—boys so inevitably the fathers of the men they are to become. From then on the action moves fast up to the threatened mutiny at Fort Zinderneuf and the ensuing battle-scenes in the desert, which are given tremendous force. Here the advantages of sound are illustrated as nowhere else in the film, and the repeated attacks on the fort, repelled with huge loss of life, are accompanied by a most realistic tumult of shots and shouts. It is all so vivid and exciting that one forgets that music-hall jokes have held up to ridicule the Old School Tie attitude which here is exemplified in its highest form. One neglects to enquire too closely into the noble minds that sacrifice all for a woman's good name. With the coming of sound, the Gestes have become less tongue-tied but no more understandable. They are still

the grand manner, M. Christian Jacque, who directed this other film, has relied on quiet undertones and sympathetic delineation of character. With the official blessing of the French military authorities, and photographed in the authentic settings, we are assured that it is a faithful reproduction of life in the Foreign Legion. What is quite obvious is that great emphasis has been laid on its brighter side, to the exclusion of those sordid and exotic factors which make it exciting but which no doubt are felt to lower the prestige of a famous regiment. Opening in a strong comedy vein, the story is simple enough. M. and Mmc. Espitalion arrive in Marseilles to claim a legacy. While his domineering wife interviews her lawyer, Fernand

GRACIE FIELDS POSING AS A 'YOUNG-MAN-ABOUT-TOWN" IN HER NEW FILM, "SHIPYARD SALLY," WHICH BEGAN ITS RUN AT THE GAUMONT ON AUGUST 6: A SCENE IN THE EXCLUSIVE WEST-END CLUB GATE-CRASHED BY SALLY FITZGERALD (GRACIE FIELDS), AND (RIGHT) FORSYTH (OLIVER WAKEFIELD).

Shipyard Sally (Gracie Fields) and her reprobate father (Sydney Howard) have been chosen by the Clydeside workers to present a petition for help to Lord Randall (Morton Selten) in London. Every ruse is tried by Sally to gain an audience, including that seen above, when Sally, posing as a man-about-town, enters Lord Randall's exclusive club. Morton Selten died recently, on July 27, aged seventy-nine.

After the environmental rigours and violence of "Beau Geste," this is insipid stuff: yet it is doubtless a truer picture. Truth is drabber than fiction, and I suppose we should be thankful that France's soldiers of the modern Legion enjoy healthy physical conditions in so fine a modern city as Sidi-Bel-Abbas. That "Un de la Légion" is not a dull film is due largely to the genius of M. Fernandel, who has somehow transformed what looks like a propaganda piece into a personal history of considerable charm. His completely persuasive performance makes much of humour, but does not shrink from pathos, and we have the impression of seeing a whole man, an experience always valuable, whatever the milieu. The henpecked husband is, in any language, a stock figure, but his development required the insight of the creator of "The Virtuous Isidore" and of the hairdresser of "Un Carnet de Bal," to raise it from the common rut.

It is particularly pleasant, now that Miss Gracie Fields is almost restored to health, to welcome at the Gaumont Cinema, Haymarket, her latest film, "Shipyard Sally." This was completed shortly before the illness which showed how warm a place this grand player has in the hearts of the British people. It is still more a pleasure to describe it as her best film yet, both as a production in itself and as a personal triumph. It is inevitable that a personality such as "Our Gracie," with so individual a genius and a unique, popular glamour, must call for scenarios of the type known as "star vehicle," where a succession of scenes are built up or strung together with little thought of the dramatic whole, and still less of any other character, in order to give full scope to the particular capabilities of the star. The outstanding disadvantage of this method is that the mechanism of construction is apt to creak too loudly, especially during the star's occasional absence from the screen, that the supporting performers are too obviously subordinate, by design rather than by inclination, and that these weaknesses combine to throw a burden on the star which may be too great to carry through successfully. Miss Fields, in the past, has had, on occasion, to labour under these difficulties. In the present case, she is more happily served, though it has clearly been the object of the producer to have the best of both worlds. As "Shipyard Sally" she presents the claims of workless' Clydeside before a Commission in





A HOLLYWOOD INTERPRETATION OF THE FOREIGN LEGION: A SCENE FROM "BEAU A SCENE FROM THE FRENCH FILM OF LIFE IN THE FOREIGN LEGION," UN DE LA GESTE," WHICH OPENED AT THE PLAZA ON AUGUST 4, SHOWING GARY COOPER (RIGHT) LÉCION," WHICH OPENED AT THE CURZON ON JULY 27: THE STAR FERNANDEL, AS "BEAU," AND RAY MILLAND AS HIS BROTHER JOHN.

"Beau Geste" and "Un de la Légion" offer interesting comparisons of French and American film interpretations of the famous Foreign Legion. "Beau Geste," of course, is a colourful melodrama: the French film, said to be absolutely correct in all its military details, is a comedy with the delicious Fernandel as the hero who is "made a man" by the not disagreeable Legion discipline.

individually. Mr. Brian Donlevy as the bullying Sergeant Markoff (why was the name changed from Lejaune?) contrives, with the microphone's aid, a ferocity no less formidable than that of his silent predecessor and actually dominates the later scenes. Two technical items illustrate the thoroughness of the production: Lest accents should give offence, the children's voices in the Brandon Abbas episodes have been duplicated in American and English, and the desert of Arizona has provided a Saharan background as realistic as could be desired. Altogether, a more adult note is struck in this re-creation of an old favourite to suit the contemporary mood.

contemporary mood.

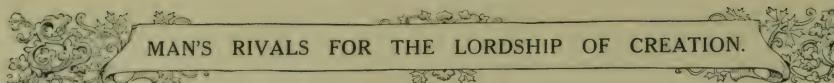
In "Un de la Légion," at the Curzon, is presented a very different aspect of the same background. While "Beau Geste" is alive with colour and violence, done in

is tempted into a neighbouring bistro, is robbed while drunk of his money and identity papers by a deserting légionnaire, and wakes up to find himself en route for Oran and the Legion. The life that he finds there, though hard, is not unpleasant, and from then on we learn how Army discipline makes a man of this légionnaire malgré lui. Amiable companionship, kindhearted officers, and a discreet affaire with a night-club girl depict a homely rather than heroic life overseas. Active service is limited to a minor engagement, and here the businesslike methods of the professional soldier do not encourage spectacular feats of daring. This affords, in fact, our only view of the desert proper, and it is disappointing to record that it resembles more a barren Highland landscape than the sun-scorched wastes which we have been led to expect. tempted into a neighbouring bistro, is robbed while

"made a man" by the not disagreeable Legion discipline.

London. Her adventures on this mission include the impersonation of an American crooner and a masquerade in male attire, situations patently inserted so as to give full scope to both her rich humour and vocal versatility, and also, possibly, to appeal to the metropolitan public on their own ground, just as the Scottish scenes will assure a wider provincial popularity. Yet the film is a comedy, and its underlying theme is not a comic subject. Though handled delicately and without direct reference, except at the beginning and at the end, unemployment runs as a dark thread throughout, and our sense of an error in taste is not quite obliterated even by the terrific climax, with Miss Fields singing "Land of Hope and Glory" through a rising crescendo of hammers as a new keel is laid and a new liner is born.

B. T.



"THE INSECT LEGION": By MALCOLM BURR, D.Sc., F.R.Ent.S.*

A NYBODY who reads the preface to Dr. Malcolm Burr's new book will be assured at once that he is not "in for" a dry scientific treatise. "It was," he says, "in rsp6 that I joined the Entomological Society of London, and the proud right to inscribe the magic letters F.E.S. after my name was a token of the finest investment I ever made, the very best annuity a man could buy. For my love of entomology has ever since been my recreation in prosperity, and my consolation in adversity." Entomology compelled him to learn foreign languages; encouraged him to travel; brought him hosts of friends; assured him a world-wide welcome; and brings, he maintains, "the clixir of longevity." "Not many years ago I was out for a walk in Bagley Wood with four old friends, of whom the two youngest were in their eightieth year. I said to one, "Won't you let me carry some of those boxes for you?" 'No,' came the reply, with the enthusiasm of a schoolboy, 'I must be ready. We might get a snake any moment.' All Nature was his playground. Then to another, whose genial rotundity was rotunder than ever, I asked in gentle chaff: 'Can you still pick up a beetle?' 'Not like this,' he answered, stooping forward. 'But I still can like this,' he explained, as he squatted on the ground, holding his body vertical. I hope I may be able to do as well in thirty years."

Here are enthusiasm and the eye for the vivid illustration; and these qualities carry Dr. Burr through his book at a gallop.

He opens with some chapters on insects and their habits, which are various and odd. The name "insect" has a more restricted application to-day than it used to have. Spiders, scorpions, mites, centipedes and many other creatures have been excluded by a six-leg limit. But even to-day the varieties are numerous enough. "There are over 600,000 kinds of insects known to Science, and the total number in existence is probably not lar short of a million . . . of animals other than insects there are known to Science something like 200,000 kinds. Insects far outnumber this.

have something like 8000 so numerous are the parasitic kinds of these little Wasps. There is a family of flies called Empidæ, of which about 300 kinds are known in Britain. When an expert collector, Dr. Edwards of the British Museum, went to investigate the went to investigate the tlies of Patagonia and Southern Chile, he brought back from that remote land 247 species of Empids, of which 198 were new to Science. It is not surprising that such an authority upon the Diptera should think that although some 60,000 kinds have been 60,000 kinds have been described already, there must be at least 250,000 in existence. So the number of species of insects in existence is surely well over a million. It may be double. And each species is living its own distinctive type of lite."

There are countless sidelights on these "types of life" here, as led by all sorts of creatures, from minute insects to butterflies with a foot-spread of lovely wing. There are records of insects using tiny pebbles as hammers, whilst some of their mates do not, which suggests learning by experience. There are stories, never stale, about ants who will ride their cows home. "The ant patiently overcomes all obstacles by the way and eventually brings its booty home in triumph. Its colleagues dash out to meet and congratulate the ant, who entertains its friends to a

An Appreciation by SIR JOHN SQUIRE.

drink from the honey-glands, but remains in personal possession, which seems surprising in a communist society." And there are extraordinary examples of hardihood. "Surely the most hard-bitten creature in existence must be the little beetle Niptus hololeucus, of which no less than one thousand five hundred and forty-seven specimens were taken out of a bottle of casein that had been stoppered for twelve years." They have been known to live in the corks of cyanide bottles, in cayenne pepper, and



WEARING AN EXPRESSION OF STUPIDITY WHICH IS ALMOST HUMAN": 88 MOTH CATERPILLAR PASSIVELY SUBMITTING WHILE A FEI OPHION, ICHNEUMON WASP, LAYS HER EGGS IN ITS BODY.



PFRHAPS THE MOST FORMIDABLE OF ALL INSECTS: THE SAGA, A HUGE CARNIVOROUS BUSH CRICKET OF THE LEVANT, WITH JAWS THAT COULD TAKE A SIZEABLE BITE OUT OF A MAN'S FINGER. (APPROXIMATELY LIFE-SIZE.)

The saga, here seen with its fore-leg raised in a kind of surrealistic parody of a Fascist salute, belongs to the Tettigonidæ. Sagas are not really massive, but have a wide expanse of spidery, heavily-armed, spiny limbs.—[Reproductions from "The Insect Legion"; by Courtesy of the Publishers, Messes. James Nisbet and Co.]

salammoniac. But they are rivalled by a fly which can live and thrive in crude petroleum. However, I don't envy them. There are insects which do without a male sex, insects which lay a million eggs a year, and insects who cannot breed unless the male be torn in half by his mate while mating. "Go to the ant," may be excellent advice for the sluggard, but there are many habits of the insect world which are rather warnings than models.

The second part of Dr. Burr's book treats of insects in relationship to man. It has been calculated that a single female Hop Aphis, if allowed to multiply without check, would at the end of a year have descendants numbering—well, to save space, I will call it one and a hundred-and-eight noughts. It is just as well, the reader may murmur, that the Hop Aphis is not allowed to multiply without check. Insects, did they so desire—readers may remember Mr. Wells's "The Empire of the Ants"—could make human life impossible. They would have prevented our existence in any event, were it not for one limitation. "Endowed with unbelievable vitality and powers of reproduction, they have never achieved the gift of size. For this saving mercy there is a definite physical reason—the limitations of their breathing apparatus. But for that, neither Man nor any vertebrate could possibly have survived." Even so, they are one of the major elements in our environment. Insects, and especially the mosquito, the louse, and various flies and bugs, have probably caused more human deaths than any other agency. Civilisations and cultures have been brought down by them, and they are held guilty of the greatest disaster of all. "Malaria was known to the Greek physician Hippocrates about the year 400 before Christ. Shortly after that period the effulgence of the arts, sciences and philosophy which followed the conquest of ancient Greece by the fair invaders from the north, reached its climax in the age of Pericles. Why then did it fade swiftly? The mosquito supplies the key. With every child infected, how can a population retain its vigour? Sapped and rotted by the insidious germ of malaria, the fair-haired race of northern origin succumbed, while the more immunised, darker, autochthonous tribes and the children of Asiatic and African captives withstood the infection better and survived, though the energies of the entire population were impaired."

Apart from insects which kill, there are those that tease, or even torture, some in a ghastly

Apart from insects which kill, there are those that tease, or even torture, some in a ghastly complicity with man. Ant and honey tortures are commonly known. Tortures by bug have prevailed. "The old emirs and khans of Central Asia used to keep them for the special purpose of torturing their prisoners. In 1842 the Emir of Bokhara thus tormented two British officers, Colonel Stoddart and Captain Conolly, who had been sent to him on a diplomatic mission. The Emir flung them into his bug-pit, where they were tormented for several months before he hauled them out and beheaded them in the market-place. The dreadful story has been recorded in general literature, but the creatures have generally been called 'lice.' They were not lice, but a species of Assassin Bug."

On the economic frant. Many is also Apart from insects which kill, there are those

were not lice, but a species of Assassin Bug."

On the economic front Man is also attacked by insects, notably the locusts. Even in Great Britain insects are reputed to take a toll of ten per cent. of all crops, virtually none being immune, and stored food is as vulnerable as growing. Happily the insect world is not united. Modern scientists are using flies against beetles and moths, and here there is still scope for great advances. And it is as well to remember when we are thinking of insect plagues, not merely that many insects are beautiwe are thinking of insect plagues, not merely that many insects are beauti-ful and harmless, but that some are directly useful. Silk and honey, cochineal and shellac are commodities we owe to insects and a caterollar. insects, and a caterpillar, imported as an ally, has been the salvation of Queensland from prickly pear. In medicine in-sects are of value, and in some parts of the world they are esteemed as food.

Dr. Burr's book may be recommended as a museum of interesting and entertaining facts, and as giving a sketch of the present position regarding man's relations with insects of the non-benevolent sort. The illustrations add greatly to its interest. In the one of "An Ophion laying its eggs in the larva of a Puss Moth," the larva (to use Barry Pain's phrase about the flock of sheep) is wearing "an expression of stupidity which is almost human."

• "The Insect Legion." By Malcolm Burr, D.Sc., F.R.Ent.S. Illustrated. (Nisbet; 12s. 6d.)

PEOPLE IN THE NEWS AT HOME AND ABROAD.



THE REV. C. M. CHAVASSE.
Recently nominated by the King for election by the Dean and Chapter of Rochester as Bishop of Rochester, in place of the Right Rev. M. L. Smith. Was Master of St. Peter's Hall, Oxford, and Rector of St. Peter-le-Bailey, Oxford.



MR. A. C. CROSSLEY, M.P. Perished on August 15 in a British Airways liner which crashed into the sea in flames off South Zeeland, en route from Heston to Copenhagen; aged thirty-six. Only son of Sir Kenneth Crossley. Bt., Unionist M.P. for Oldham, 1931-35, and Stretford since 1935.



M. FRITZ MANNHEIMER.
Partner in the Dutch banking firm of Mendelssohn and Co., Amsterdam, which recently suspended payment. Died suddenly on August 9; aged forty-nine. Recently made a Grand Officer of the Legion of Honour for his contribution towards the restoration of French public finance.



The well-known French author and dramatist. Appointed the first chief of the French propaganda department. M. Giraudoux came before the public eye in this country with his play "Amphytrion 38." which had a long and successful run.



A PAGE OF PERSONALITIES OF THE WEEK.

SIR GEORGE GILLETT.
Died on August 10; aged sixty-nine,
A former Commissioner for the
Special Areas in England and Wales,
Member of the Finsbury Borough
Council, 1900-06, and of the L.C.C.,
1910-22. M.P. (Lab.) for Finsbury,
1923-31; (Nat. Lab.), 1931-35.



MR. FRANK ROMER, M.R.C.S.E., L.R.C.P.
The well-known surgeon. Died on August 7; aged sixty-eight. Younger son of late Right Hon. Sir Robert Romer. At one time in charge of the Mechano-Therapeutic Departments at Croydon, Millbank, and Aldershot.



A FOCUS OF THE ANXIOUS ATTENTION OF EUROPE: DR. BURCKHARDT, LEAGUE COMMISSIONER IN DANZIG, WHO RECENTLY VISITED HERR HITLER. new turn was given to the Danzig question by the visit of Dr. Burckhardt, the eague of Nations High Commissioner, to Herr Hitler at Berchtesgaden on August 13. was understood in Danzig that he had discussed purely local questions. As soon he received Herr Hitler's invitation, Dr. Burckhardt passed word of it to the British Government, as rapporteur on the League Committee of Three for Danzig.



MR. LL. B. ATKINSON.

Died on August 9; aged seventy-five. A well-known figure in the electrical industry, particularly its cable-making branch. President of the Institution of Electrical Engineers, 1920. A Past Chairman of the Council of the Royal Society of Arts.



SIR ADAM NIMMO. Prominent Scottish coal-owner. Died on August 10; aged seventy-two. Had been for many years the coal-owners' champion. He was uncompromisingly opposed to Nationalisation. Was assistant to the Coal Controller during the war. Was a prominent member of the Baptist Union.

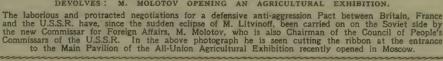


THE EARL OF ROSSLYN.

SIR STANLEY MACHIN. Died on August 12; aged seventy-eight.
President of the London Chamber of Commerce, 1920-22, and of the Association of British Chambers of Commerce, 1924-25.
Chairman of organising committee of the Ninth Congress of Chambers of Commerce of the Empire, Toronto, 1920.



A SOVIET LEADER UPON WHOM THE CONCLUSION OF AN ANTI-AGGRESSION PACT LARGELY DEVOLVES: M. MOLOTOV OPENING AN AGRICULTURAL EXHIBITION.





MR. OMAR RAMSDEN. The celebrated English goldsmith. Descently; aged sixty-five. The bowl made in 1937 to mark the occasion with Britain had three kings in a twelvemor was one of the world's outstanding worin gold. He worked for royalty, cathedra City companies and colleges.

SIGHTSEEING BY CANAL AND CABLE RAILWAY: THE ZURICH EXHIBITION.



THE REPRODUCTION OF A SWISS VILLAGE, COMPLETE WITH A POST-OFFICE, DENOTED BY THE SIGN OF THE POSTMAN'S HORN: A CORNER OF THE SWISS NATIONAL EXHIBITION AT ZÜRICH.



THE CEILING OF ONE OF THE BRIDGES WHICH CONNECT THE VARIOUS ELEVATED PAVILIONS IN THE "LAND AND PEOPLE" SECTION: THE FLAGS OF THE 3000 SWISS COMMUNITIES.



THE LINK BETWEEN THE PAVILIONS ON THE OPPOSITE BANKS OF THE LAKE OF ZÜRICH: THE VIEW FROM THE CABLE RAILWAY WHICH RUNS 210 FT. ABOVE WATER-LEVEL BETWEEN TWO METAL TOWERS 2700 FT. APART.



BOATS INSTEAD OF BUSES AND TAXIS: BESIDES GOING THROUGH THE PAVILIONS (AS IN THE LEFT-HAND PHOTOGRAPH), THE MINIATURE CANAL ALSO ENABLES VISITORS TO TOUR THE EXHIBITION GROUNDS.



A COMFORTABLE MEANS OF VIEWING AN EXHIBITION: VISITORS GOING THROUGH AN ENGINEERING PAVILION, SEATED IN ONE OF THE BOATS BORNE ALONG BY THE SWIFTLY-FLOWING MINIATURE CANAL.

The Swiss National Exhibition, at Zürich, opened on May 6 and is to continue until the end of October. The Exhibition, which records the progress realised over a quarter of a century in industries, arts and sciences, is the first of its kind to be held since before the Great War. The buildings are scattered over two large parks on opposite sides of the Lake of Zürich. The cable railway illustrated above, which runs at a height of 210 ft. above water-level, between two metal

towers, 2700 ft. apart, provides a link between the two parts, and fine views of the city and Exhibition. There is also a service of motor-boats. Visitors can see a large part of the Exhibition, and even go through pavilions, by means of the small boats on the swiftly-flowing miniature canals. Exhibits are grouped by classes—such as husbandry, watchmaking, forestry—and nearly every group includes workshops and models in operation.

FOUNDING A "TOWER OF SILENCE": A RITE WITH NAILS AND THREAD.



PART OF THE FOUNDATION CEREMONY OF LAYING A PARSI "DOKHMA," OR TOWER OF SILENCE, ON TOP OF WHICH THE DEAD ARE LEFT TO BE EATEN BY VULTURES—THE PRIESTS WINDING THE SACRED THREAD ROUND THE 301 NAILS MARKING A GEOMETRIC DESIGN, AND CHANTING PRAYERS.

THE earth, according to the Parsis, is sacred, being the mother of life: she must not, therefore, be polluted by anything dead and decaying. Hence the Parsi method of disposing of the dead, the corpse being placed on a grating on top of the "Dokhma," or Tower of Silence. The flesh of the body is eaten by vultures; the bones fall through the grating. The initiatory ceremony ("Tana") of a Tower of Silence, seen here, was recently performed at Bangalore (South India) in the presence of a large gathering of devout Parsi Zoroastrians, some of whom had gone there from almost all parts of India. Nailing is the fundamental process of the ceremony. The central nail weighs about a maund (28 lb.), the total number of nails being 301. These are all hammered into the ground in the geometrical design shown in the photograph. The four nails nearest the central one each weighs a quarter-maund (7 lb.). Around these the priests wind the sacred thread, whilst chanting special prayers. The thread or yarn is taken from 101 yarns of double thread wrapped round on nails, the length being about 1800 ft. The end is finally wrapped round and round the big central nail. The central circle represents the main gutter which receives the bones after the flesh of the body has been eaten away by the vultures. The four side gutters meet the main central one, which has connections to the outside gutters going deep down into the earth. The two outer circles represent the "Pavis," or the varied sizes of blocks for placing the bodies according to size, age and sex, and these "Pavis" are directly connected to the side gutters by means of narrow channels connecting these blocks. The "Tana" is one of the most sacred ceremonies of the Zoroastrians. God—in the Parsi holy book, "Avesta"—blesses "those who witness and help the building of the 'Dokhma,' wishing them happiness in both this and the spiritual world."



THE DESIGN COMPLETED, THE REMAINS OF THE SACRED THREAD ARE WOUND AROUND THE CENTRAL NAIL, THIS BEING THE LARGEST AND HEAVIEST, WEIGHING 28 LB., OR ONE MAUND.

THE CHRONICLE OF THE CAR.

By H. THORNTON RUTTER.

new booklet issued by the British
Road Federation called "From
Here to There." It starts off by
effectively disposing of the usual arguments against
road improvement schemes—"They want to spoil
the country with miles of ugly new roads," 20 m.p.h.
is fast enough for anybody," "What about the
Pedestrian?" and similar reactionary objections—
and in doing so reminds us that in 20 years over
roo,ooo people have been killed in road accidents, and
that these same inadequate roads may have to carry

THE case for more and better roads has never been expressed

more convincingly than it is in the

twice the present amount of traffic in fifteen years' time.

Then, in short, telling sentences, enlivened by extremely clever illustrations, the booklet shows how our existing roads have been developed from the original pack-horse routes, and how this development has been hindered and rendered unnecessarily haphazard because the responsibility for it is shared by responsed authorities.

by 1550 local authorities.

What is the remedy? It is all very well to criticise, you may say, but it is another thing to suggest feasible plans for curing the trouble. "From Here to There" shows us that there are no less than three detailed plans, all ready to be proceeded with, and covering every section of the problem. These three plans are County Surveyors' Society report, the

Eventually matters came to such a pass that the Ministry of Transport told the County Council that the "Halt", signs must only be regarded as a temporary measure, pending the construction of a round-about. Nothing has been done about it, and the police continue to reap a rich harvest from passing

about it, and the police continuer ap a rich harvest from passis motorists—fines totalling over f200 were imposed at the Somerton Sessions on April 24 alone. So the R.A.C.have quite rightly reopened the whole matter in a long letter to the County Council, a copy of which has been sent to the Ministry of Transport. This time it is to be hoped that a time limit will be set by the Ministry in which to carry out a "major improvement."

that desired effect it must be faithfully observed by every road user. I notice with the utmost satisfaction that 45 cyclists were fined at Cambridge recently for swooping into the main road and ignoring the signs.

main road and ignoring the signs. The trouble is that it might be used by the Ministry of Transport as an alternative to modifying side-turnings so that traffic cannot swing straight into a main road.



THE STANDARD "TEN" SALOON AGAINST THE MEDIÆVAL BACKGROUND OF CAREW CASTLE, WHERE THE FIRST TOURNAMENTS ARE SAID TO HAVE BEEN HELD.

In the ordinary course of events I have little sympathy for motorists who get caught by a "Halt" sign, especially when they admit that they saw the sign and thought that slowing down was sufficient. But the Podimore crossing is different, because it is erected on an "A" road, which is inexcusable. So long as secondary roads and lanes are allowed to debouch directly on

to main roads, the "Halt" sign will continue to be a valuable method of reducing accidents; but to have

I do not know who is responsible for the styling—to use an Americanism—of the Sunbeam-Talbot coachwork, but whoever it is deserves full marks. The range of 10-h.p. models has now been announced for 1940, and extremely attractive machines they are. There is a newcomer in an open two-seater sports model which I am sure is going to be very popular. Behind the front seats is an enormous space for luggage extending right into the tail, so that the car would be really ideal for a long tour. In the tail there is a shelf on which the side-screens are stowed in an envelope, so as to keep them from being scratched. The hood drops into the luggage well, out of sight when not in use, and the whole of the rear part of the car is enclosed by a neat tonneau-cover. The price of this new model is £248, the same as the sports tourer. The two other cars in the range are a sports saloon, selling at £265, and a drop-

head coupé, which is listed at £285.

With many people giving up their expensive, high-powered cars at the end of the year, when the increased

horse-power tax comes into operation, I can foresee a fine future for such a high-class, well-finished light car as the Sunbeam-Talbot "Ten."

Talbot "Ten."

The "Motor Trade's Own," as the new technical units of the Royal Army Ordnance Corps, Territorial Army, are known, is rapidly taking shape. Five well-known members of the motor trade have now been selected by the National Service Committee of the Retail Motor Industry to command the units now being raised in various parts of the country. Lieut.-Col.* K. C. Johnson-Davies is to command the 5th Ordnance Field Park at Birmingham; Major Walter Prestage will be in charge of the 14th Army Field Workshop at Birmingham; Major Arthur Guy is to command the 4th Anti-Aircraft Brigade Workshop at Gloucester and Cheltenham; Major E. R. Caffyn will be the head of the 10th Army Field Workshop at Brighton, with sections in Worthing, Eastbourne and Haywards Heath; and Major L. M. St. G. Carey is to command the 6th Army Field Workshop at Southampton, with sections in Bournemouth, Southsea, and the Isle of Wight. Further units are being formed in the County of London, Essex, Lancashire, with headquarters in London, Dagenham, Manchester, Kidderminster, Dundee and Glasgow.

The maintenance and servicing of the mechanised vehicles of the Territorial Army Field Force, whose establishments have recently been doubled, is now a formidable problem, and is the reason why these new technical units have been formed. The personnel is being recruited largely from the motor and garage trades, and although it is not long since the formation of the units was first announced, I understand that the position in regard to recruiting is highly satisfactory.



A 41-LITRE BENTLEY OVERDRIVE WITH DROP-HEAD COACHWORK BY JACK BARCLAY.

report of the Select Committee of the House of Lords on the Prevention of Road Accidents, and Sir Charles Bressey's Highway Development Plan for Greater London.

You will notice that I used the word "feasible." I did so advisedly, because the final devastating fact remains that motor transport pays approximately £88,000,000 annually in special taxation, which is nearly £25,000,000 more than the sum actually spent on the roads. When the horse-power tax goes up to 25s., it would seem that there will be even more money available, and the British Road Federation point out that the increase from motor taxation alone would cover the interest and repayment of a big national Road Loan over a period of thirty years. The increase in taxation is admittedly intended for defence, but no one will deny that a proper road system is an essential part of the nation's defence.

The case, then, appears to be unanswerable: the money can be found, and the Ministry of Transport already has full legal powers to buy land for the building of trunk roads wherever it thinks fit. What is wanted is a national plan and a time schedule for carrying out the recommendations of the three reports—the County Surveyors, the Alness, and the Bressey. Copies of the booklet can be obtained free from the Federation at 120, Pall Mall, London, S.W.1, and it is to be hoped that it will be read by as many motorists as possible. No one can fail to be impressed by its logic.

Meanwhile I notice that the R.A.C. have also been active lately, but over a road problem of a purely local character, to wit, the notorious Podimore cross-roads. Last summer the Somersetshire County Council put up "Halt" signs at the crossing on an "A" class road, with the result that hundreds of motorists, thinking that as they were on the main road they could not really be intended to stop, overlooked them and were promptly caught by the police.



SIR MALCOLM CAMPBELL IN HIS NEW "BLUE BIRD"—WHICH WAS LAUNCHED ON CONISTON LAKE ON AUGUST 15, FOR HIS ATTEMPT TO SET UP A WATER SPEED RECORD OF MORE THAN 150 M.P.H.

"Blue Bird II.," is 28 ft. long with beam 10 ft. 10 in. New in design, she is to skim over the water on three steps "like a three-legged stool, to give her balance," in Sir Malcolm's words. The attempt gave rise to considerable discussion, as to the suitability of speed trials on Coniston Lake. (Topical Press.)





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science" says the doctor of to-day, body has been starved for years of lung, thanks to Lord Nuffield, is several weeks to restore it to fullgenerally available now and will save blooded health and strength. But innumerable lives. Ortake pneumonia. 'Sanatogen' will do this. And Even the fatal type 'B' has become because it is a Nerve-Tonic and a less dangerous, thanks to the new Food, not a mere stimulant, the good sulphanilamide treatment. Or think it does is positive and lasting. of the nervous exhaustion which is almost the characteristic disease of won't work miracles—but it will work our age. We understand that as we wonders. never did before; and we know why 'Sanatogen' Nerve-Tonic Food has iust those qualities necessary to bring diet by 23.5%. back our nervous forces and restore us to vigorous, exuberant health."

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WHEN one has said all that has to be said about the various styles of old furniture, and the woods in favour in different generations, and has printed good photographs of all sorts

of pieces, there still remains an essential quality which cannot be described satisfactorily in words, and is not easily translated into photographic terms This is the aspect of the wood itself. Put it this way: if there existed an exact copy of one of the bureaux illustrated on this page, a photograph would almost inevitably make it appear an identical piece—and so it would be, as far as form and structure and material were concerned. What it would not, and could not, possess would be the polish of more than a century of devoted rubbing. Some people call this peculiar polish patina — which seems to me a very high-falutin' term to use, suitable to the surface quality of a Renaissance bronze, but a trifle pretentious if applied to furni-Whatever one calls it, there is no quick substitute for this mellow, cared-for appearance, and there is no way of recognising it except by going about with one's eyes wide open, com-paring first-class reproductions with first-class originals, and becoming sensitive to the very subtle tones which old wood acquires in course of time if it is treated with respect-that is, with a pure wax polish, and not by a good, hearty french polisher. The latter gentleman produces a brilliant mirrorhke surface, but completely destroys the virtue of the wood, and if by some oversight he has been allowed to



THE WRITING-TABLE IN THE LATE EIGHTEENTH CENTURY MOST ELEGANT PIECE, WHOSE COMBINATION OF RIGHT-ANGLES FORESHADOWS TWENTIETH-CENTURY TASTE. (Courtesy of Sotheby.)

exercise his profession upon a fine old piece, it will be another hundred years before his vandal work can be forgotten—he can be as dangerous to good furniture as a slap-dash restorer and cleaner to a good painting. Time, and a pure wax polish, is all that is necessary, plus a reasonable amount of pernickety house-pride; given that, even a starved, ill-fed bit of rabinet-work soon acquires the mellow richness of

COLLECTORS. PAGE FOR \mathbf{A}

ENGLISH WRITING-TABLES.

By FRANK DAVIS.

old yet healthy wood and well repays the attention given to it. Wood, like the coat of a horse or the human skin, needs proper grooming if it is to look its best. Moreover, the more delicate pieces, hke the more delicate human beings, are sensitive to extremes of heat and cold, especially to the former, which is why some very extraordinary and rare French and English furniture has warped when kept for a year or two in super-heated rooms in the United States-



2. THE WRITING-TABLE, SOME TWENTY YEARS LATER: A MOST SERVICEABLE WALNUT CABINET, AND ONE WHICH CAN BE SAID TO BE THE STANDARD FOR ITS PERIOD.

(Courtesy of H. Blairman and Sons.)

the thin veneers of walnut. satinwood, tulip - wood and rosewood could not stand There are innumerable ways of solving this apparently simple problem, the simplest being a table with drawers instead of legs—the ordinary knee-hole library desk— the earliest of which in existence seems to be that made for Samuel Pepys, and which has remained in fashion ever since, with or without embellishments in the way of carving and a roll-top. The latter idea seems to have come over from France in the eighteenth century. The bureau-bookcase type, with a fall front

-as popular as ever to-day without the bookcase-is seen in a very distinguished form in Figs. 1 and 2. former is the more unusual: shaped glass doors, turned legs with ball feet and shaped stretcher with small turned finial-characteristics which date this piece to 1700 or thereabouts. Fig 2 the markings of the walnut veneers come out clearly in the photograph— is perhaps twenty years later. Variety neatly introduced by a broken top This type, with or without a mirror, can be said to be the standard for its period; and no one before or since has devised a piece which is at once more comely and so severely practical; every inch of space from top to bottom can be utilised for papers and books; at the same time, there is ample room for writing. Sixty years later one still finds monumental desks for libraries, but the tall bureau bookcase is out of favour; the whole tendency of cabinet-making is towards something more obviously elegant, owing a good deal to certain exquisite little French Louis XVI. pieces so charming that it would be almost a crime to write anything upon them but a love-letter, and a short one at that. (There are such things as soufflés in the furniture world as well

as in cookery books.)
An English translation of this French fashion is the sober little bureau of harewood (Fig. 3), with its Greek vase inlay, which appeared at Sotheby's about a year ago. Rather a good example of late eighteenth-century work to place before a designer of 1939 who may imagine that a combination of right-angles is a device invented by himself. Note the refinement of the

slender, tapering legs, which add lightness and grace to a wonderfully well-balanced piece. Fig. 4 is just a table plus drawers, and one of the best things ever



this page have been chosen partly in an attempt to give by means of a photo-graph something of the quality of old wood which has been well-kept; and partly as variations on a theme-the theme being the writing-table. (Courtesy of Mallett and Son) the strain. It is only fair to add that this rather obvious warning is not so necessary now as it was even twenty years ago-for more people appreciate the beauty of first-class furniture to-day and understand its intrinsic value. In spite of what I have said above, it is possible that of the something lovely mellow tones of the pieces illus-

trated here will come

out in the reproduc-

I. THE WRITING-TABLE, C. 1700: A SWALL

C. 1700: A SWALL
WALNUT BUREAU WITH
SHAPED GLASS DOORS,
TURNED LEGS WITH BALL

FEFT, AND SHAPED STRETCHER WITH TURNED

The pieces appearing on

tion. They have been chosen partly for this, and partly because they represent variations upon a single theme, rather like the variations of a musical composition. The types are familiar enough, yet once upon a time they were original. One gets used to a certain design, and easily forgets that some obscure individual invented it and must have put it upon Wanted: a the market as a tentative experiment. table at which to write, plus drawers and shelves.



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(Courtesy of Frank Partridge and Sons.)

invented by English cabinet-makers-the "Carlton House" writing-table; so-called because there were several in old Carlton House. Not easy to find, they conform to type with minor variations: sometimes they have turned legs, sometimes the side drawers are stepped back. Few men wrote less than the Prince Regent; nevertheless, his memory will always remain attached to this very distinguished type of writing-table.



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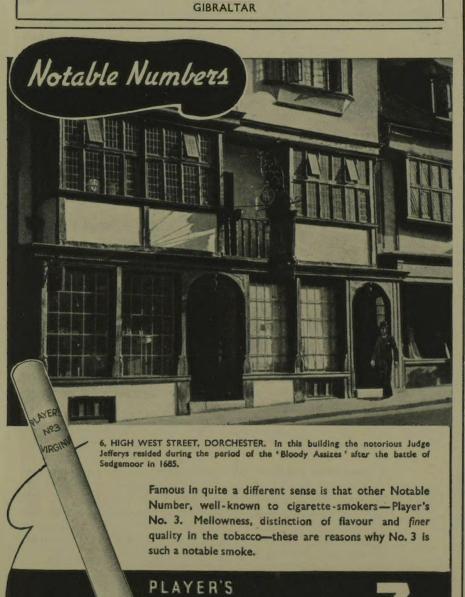
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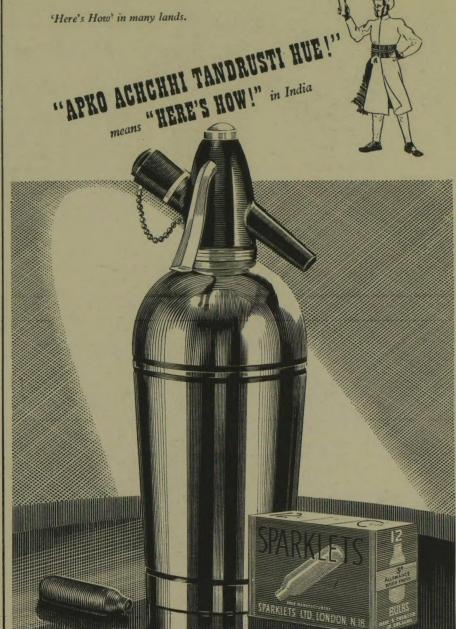
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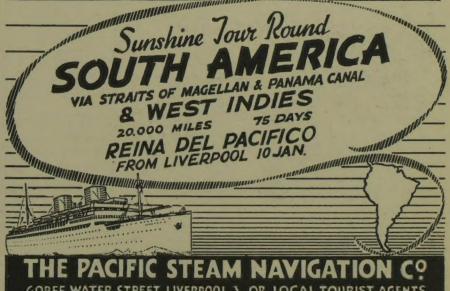
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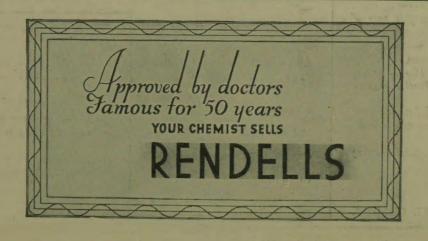
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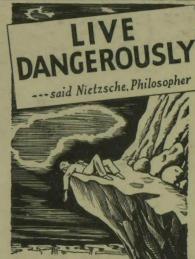
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